Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- [ ] Coloured covers/ Couverture de couleur
- [ ] Covers damaged/ Couverture endommagée
- [ ] Covers restored and/or laminated/ Couverture restaurée et/ou pelliculée
- [ ] Cover title missing/ Le titre de couverture manque
- [ ] Coloured maps/ Cartes géographiques en couleur
- [ ] Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleue ou noire)
- [ ] Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur
- [ ] Bound with other material/ Relié avec d'autres documents
- [ ] Tight binding may cause shadows or distortion along interior margin/ La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- [ ] Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/ Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- [ ] Additional comments:/ Commentaires supplémentaires:

- [ ] Coloured pages/ Pages de couleur
- [ ] Pages damaged/ Pages endommagées
- [ ] Pages restored and/or laminated/ Pages restaurées et/ou pelliculées
- [x] Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées
- [ ] Pages detached/ Pages détachées
- [x] Showthrough/ Transparence
- [ ] Quality of print varies/ Qualité inégale de l'impression
- [ ] Continuous pagination/ Pagination continue
- [ ] Includes index(es)/ Comprend un (des) index

Title on header taken from:/ Le titre de l'en-tête provient:

- [ ] Title page of issue/ Page de titre de la livraison
- [ ] Caption of issue/ Titre de départ de la livraison
- [ ] Masthead/ Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/ Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
						✓					

from W. J. Dick

NATIONAL LIBRARY
CANADA
BIBLIOTHÈQUE NATIONALE

SURVEYS BRANCH
SEP 11 1913
INTERIOR DEPT

INTERNATIONAL GEOLOGICAL CONGRESS,

TWELFTH SESSION, CANADA, 1913

File

Secretary's Office:—

VICTORIA MEMORIAL MUSEUM, OTTAWA, CANADA.

The Session will be held at the University of Toronto, Toronto from August 7 to 14.

Patrons.

Honorary President:

Field Marshal, His Royal Highness the Duke of Connaught, Governor-General of the Dominion of Canada, Ottawa, Canada.

Honorary Vice-Presidents:

The Rt. Hon. The Prime Minister of the Dominion of Canada and Secretary of State for External Affairs, Ottawa, Canada.

The Hon. The Minister of Mines, Ottawa, Canada.

The Hon. The Minister of Railways and Canals, Ottawa, Canada.

The Hon. The Minister of Lands, Forests and Mines of Ontario, Toronto, Canada.

The Hon. The Minister of Colonization, Mines and Fisheries of Quebec, Quebec, Canada.

The Hon. The Premier and Minister of Mines of British Columbia Victoria, Canada.

The Hon. The Commissioner of Works and Mines of Nova Scotia, Halifax, Canada.

DELEGATIONS AND MEMBERS AS ON MAY 22, 1913.

So many requests have been made for advance lists of delegations and members that this list is being printed now although it will be out of date before it is printed, for the reason that members are joining and delegations are being appointed daily.

QE1
I6
1913d

At the last Session, which was held in Sweden in 1910, there were 879 members, 625 of whom actually attended the Session. Thirty-six countries were represented and there were 175 delegations, appointed by various governments, universities and societies throughout the world.

On May 22, the numbers of the Twelfth Session are as follows:—

36 countries represented; 155 delegations; 520 members.

List of Delegations.

Argentine.

Government of Argentine: J. KEIDEL, 1138.
Directorate General of Mines, Geology and Hydrology of the Department of Agriculture, Buenos Aires: J. KEIDEL, 1138.
Museo Nacional de Historia Natural, Buenos Aires: D. A. GALLARDO, 1135.

Austria.

Université de Lemberg, Lemberg: R. ŻUBER, 217.

Belgium.

Gouvernement de Belgique, Bruxelles: A. RENIER, 376.
Société Géologique de Belgique, Liège: L. E. DE BUGGENOMS, 378; P. L. G. ZOUDE, 203.

British Guiana.

Government of British Guiana: F. B. HARRISON, 1019.

British Isles.

Government of Great Britain: G. A. J. COLE, 187.
Geological Survey of Great Britain, London: Dr. STRAHAN, 159.
Geological Survey of Ireland, Dublin: G. A. J. COLE, 187.
Geological Survey and Museum, Edinburgh: Dr. STRAHAN, 159.
Board of Education, London: A. STRAHAN, 159.
University of Oxford, Oxford: W. J. SOLLAS, 1125; H. L. BOWMAN, 1005.
University, Glasgow: A. E. KITSON, 163.
University College, Dundee: H. MARSHALL, 1044.
University, Sheffield: B. HOBSON, 204.
University of Bristol, Bristol: H. S. REYNOLDS, 1056.
University, St. Andrew's: T. J. JEHU, 211.

University, Aberdeen: W. A. Gibb, 1017.
Cambridge University, Cambridge: A. Harker, 209.
University of London, London: T. F. Sibly, 1057.
University of Durham, Newcastle-upon-Tyne: H. Louis, 1041.
University College, Galway: R. J. Anderson, 209.
Linnean Society, London: H. F. Osborn, 147; Miss C. A. Raisin, 158.
Manchester Literary & Philosophical Society: Sir T. H. Holland, 345.
Staffordshire & Warwickshire Institution of Mining Engineers, Birmingham: John Cadman, 423.
Geological Society of London, London: Aubrey Strahan, 159.
Geological Society of Glasgow, Glasgow: John Horne, 1022.
Royal Society, London: F. D. Adams, 1; A. Harker, 207.
Royal Scottish Geographical Society, Edinburgh: J. Horne, 1022.
Mineralogical Society, S.-Kensington: H. L. Bowman, 1005.
Geologist's Association, London: J. W. Evans, 136.
Institution of Mining Engineers, London: J. P. Porter, 47; W. L. Goodwin, 28; G. H. Ashwin, 1141.
North of England Institute of Mining and Mechanical Engineers, Newcastle-upon-Tyne: T. W. Gibson, 1144.
British Association for the Advancement of Sciences, London: H. A. Miers, 366.

British West Indies.

Government of Trinidad: J. Cadman, 423.
Mines Department, Trinidad: J. Cadman, 423.

Canada.

Mines Branch of the Department of Mines, Ottawa: Dr. Eugene Haanel, 31; Dr. Alfred W. G. Wilson, 67; Dr. John McLeish, 45; Mr. Hugh S. De Schmid, 70.
Department of Colonization, Mines & Fisheries, Quebec: S. Dufault, 1126; T. C. Denis, 5; J. B. Valiquette, 57.
McMaster University, Toronto: W. H. McNairn, 199.
Université Laval, Quebec: Abbé R. Guimont, 30.
University of New Brunswick, Fredericton: P. Cox, 1127.
Université Laval, Montreal: P. P. Choquette, 194; A. Mailhiot, 68.
École Polytechnique, Montreal: A. Mailhiot, 68.
Dalhousie College, Halifax: A. S. Mackenzie, 1118; D. S. McIntosh, 365.

University of Ottawa, Ottawa: Rev. A. Lajeunesse, 1031; Rev. J. McGuire, 1045.
University of Saskatoon, Saskatoon: G. H. Ling, 1145.
University of Manitoba, Winnipeg: R. C. Wallace, 52.
McGill University, Montreal: F. D. Adams, 1; J. A. Bancroft, 16.
Nova Scotian Institute of Science, Halifax: D. S. McIntosh, 365.
Royal Society of Canada, Ottawa: H. M. Ami, 14; H. L. M. Lambe, 40; J. White, 53.
Queen's University, Kingston: W. T. Mac Clement, 1148.
School of Mining, Kingston: W. L. Goodwin, 28; W. Nicol, 46; M. B. Baker, 15; J. E. Hyde, 82.

Colombia.

Government of Colombia, Bogota: T. Mullens, 1129.

Denmark.

Gouvernement Royal du Danemark, Köbenhavn: O. Boggild, 218.
Commissionen for Ledelsen af Geologiske og Geographiske Undersögelse i Grönland, Köbenhavn: O. Böggild, 218.
Dansk Geologisk Forening, Köbenhavn: O. Böggild, 218.
Kommissionen for Danmarks geologiske Undersögelse, Köbenhavn: V. Madsen, 356.

France.

Service de la Carte Géologique de la France, Paris: P. Termier, 189; Ch. Barrois, 368.
Société Française de Minéralogie, Paris: Ch. Barrois, 368; P. Termier, 189.
Académie de Grenoble, Grenoble: W. Kilian, 1028; P. Lory, 263.
Université de Caen, Caen: Bigot, 215.
École Polytechnique de Paris, Paris; P. Termier, 189.
Académie de Mâcon, Mâcon: A. Tarrut, 1143.
Université de Paris, Paris: L. E. Gentil, 374.
Société Géologique du Nord, Lille: P. Pruvost, 262.
Muséum National d'Histoire Naturelle, Paris: S. Meunier, 1149.
Association Amicale des Éleves de l'École National Supérieure des Mines, Paris: P. M. Termier, 189.

Germany.

Government of the German Empire: R. BECK, 334; H. E. BOEKE, 198; Dr. KRUSCH, 1030; Dr. PENCK, 387; W. PAULCKE, 1140; Dr. SALOMON, 1062; H. STILLE, 1064; O. WILCKENS, 337; T. F. W. WOLFF, 249.

Königl. Preussisches Ministerium für Handel und Gewerbe, Berlin: P. KRUSCH, 1030.

Königl. Preussische Geologische Landesanstalt, Berlin: P. KRUSCH, 1030; W. WOLFF, 249.

Königl. Sächsische Regierung, Dresden: R. BECK, 334.

Königl. Sächsische Bergakademie, Freiberg: R. BECK, 334.

Königl. Sächsische Geologische Landesanstalt, Leipzig: Dr. STILLE, 1064; R. BECK, 334.

Königl. Sächsische Geologische Landesuntersuchung, Leipzig: Dr. STILLE, 1064.

Königl. Preussische Akademie der Wissenschaften, Berlin: Dr. PENCK, 387.

Grossherzogl. Badische Technische Hochschule Fridericiana, Karlsruhe: W. PAULCKE, 1140.

Grossherzogl. Hessische Geologische Landesanstalt, Darmstadt: G. KLEMM, 1029.

Universität Heidelberg, Heidelberg: W. SALOMON, 1062.

Vereinigte Friedrichs Universität Halle-Wittenberg, Halle: H. E. BOEKE, 198.

Naturforschende Gesellschaft zu Halle, Halle a. S.: H. E. BOEKE, 198.

Westfälische Berggewerkschaftskasse, Bochum: P. KUKUK, 238.

Niederrheinischer Geologischer Verein, Bonn: G. STEINMANN, 401.

Oberrheinischer Geologischer Verein, Stuttgart: Dr. WEIGAND, 243.

Deutsche Geologische Gesellschaft, Berlin: P. KRUSCH, 1030.

Geographische Gesellschaft Greifswald, Greifswald: L. MILCH, 1122.

Deutsche Mineralogische Gesellschaft, Jena: [illegible]GEAT, 1139.

Freiberger Geologische Gesellschaft, Freiberg: [illegible]K, 334.

Guatemala.

Government of Guatemala: G. N. MORANG, 10[illegible]9.

Hungary.

Université Royale Hongroise François-Joseph, Kolozsvár: JULES DE SZÁDECZKY, 252.

Institut Géologique du Royaume Hongrois, Budapest: LOUIS LÓCZY DE LÓCZ, 1039.

Royal Hungarian Technical University, Budapest: [illegible]A-FARZIK, 1131.

India.

Geological Survey of India, Calcutta: Dr. L. L. Fermor, 300.

Italy.

Società di Naturalisti in Napoli ex Collegio Medico, Napoli: R. W. Brock, 2.
Regia Academià dei Lincei, Rome: D. De Stefania, 349.
Regia Università degli Studi de Parma, Parma: P. V. de Régny, 250.
Società Geologica Italiana, Rome: E. Mattirolo, 313.

Japan.

Asiatic Society of Japan, Tokyo: J. Milne, 1150.

Netherlands.

Government of the Netherlands: F. Molengraaff, 1048.
Koninklijke Akademie van Wetenschappen, Amsterdam: F. Molengraaff, 1048.
Geologisch-Mijnbouwkundig Genootschap voor Nederland en Koloniën, 's-Gravenhage: E. C. Abendanon, 1142.

Norway.

Norges Geologiske Forening, Kristiania: O. Andersen, 1151.

Peru.

Sociedad de Ingenieros, Lima: C. I. Lisson, 1132.

Russia.

Gouvernement de la Russie: Th. Tchernyschew, 1066; W. Vernadsky, 179; M. Stepanow, 1152.
Commission Sismique Centrale, St. Pétersbourg: Th. Tchernyschew, 1066.
Institut Agronomique, Moscou: W. Samojloff, 333.
Institut Polytechnique de l'Empereur Pierre le Grand, St.-Pétersbourg: M. Loewinson-Lessing, 397.
Société Impériale des Naturalistes de Moscou, Moscou: J. W. Samojloff, 333; W. Vernadsky, 179; W. Archinow, 237.
Geografiska Föreningen, Helsingfors: L. Borgström, 1146.
Société Géologique de Helsingfors, Helsingfors: H. Hausen, 1153.

Spain.

Instituto Geologico de Espana, Madrid: A. M. Bertran de Lis, 403; E. Dupuis de Lôme, 402.

Sweden.

Geologiska Sektionen, Uppsala: P. QUENSEL, 328.
Stockholms Högskola, Stockholm: H. BÄCKSTRÖM, 260; A. P. GEIJER, 232.

Turkey.

Robert College, Constantinople: L. DOMINIAN, 148.

Union of South Africa.

Government of the Union of South Africa, Cape Town: H. W. SMYTH, 1061.
Geological Survey of South Africa: E. T. MELLOR, 352.
Geological Society of South Africa, Johannesburg: E. T. MELLOR, 352.

United States of America.

Government of the U.S.A.: C. CHAMBERLIN, 1012; G. O. SMITH, 1059; DAVID WHITE, 1086; W. LINDGREN, 415; G. F. BECKER, 1003; A. H. BROOKS, 258; M. R. CAMPBELL, 1010; W. CROSS, 1011; F. L. RANSOME, 151; A. KEITH, 1026; W. D. SMITH, 1060.
U. S. Geological Survey, Washington: G. H. ASHLEY, 1001; A. HAGUE, 1018; F. LEVERETT, 141; T. W. VAUGHAN, 410; H. S. WILLIAMS, 131.
State of Wyoming Geological Survey, Cheyenne: A. C. BOYLE, 1006; R. D. TYLER, 1069.
State of Vermont Geological Survey, Burlington: G. H. PERKINS, 128; ELBERT C. JACOBS, 1024.
Iowa Geological Survey, Iowa City: G. F. KAY, 1025; J. H. LEES, 1033.
University of the State of New York, Geological Survey, Albany: JOHN M. CLARK, 161.
State of Virginia Geological Survey, Charlottesville: T. L. WATSON, 138.
National Academy of Sciences, Washington: G. F. BECKER, 1003; W. CROSS, 1011; W. LINDGREN, 415; D. WHITE, 1086; A. HAGUE, 1018.
Washington Academy of Sciences, Washington: T. C. CHAMBERLIN, 1012; C. D. WALCOTT, 119; D. WHITE, 1086; J. P. IDDINGS, 321.
University of Virginia, Charlottesville: T. L. WATSON, 138.
Mount Holyoke College, South Hadley: M. TALBOT, 123.
Wesleyan University, Middletown: W. N. RICE, 185.
George Washington University, Washington: G. P. MERRILL, 327.

Bureau of Economic Geology and Technology of the University of Texas, Austin: J. A. UDDEN, 1070.
University of North Dakota, Grand Forks: A. G. LEONARD, 353.
Massachusetts Institute of Technology, Boston: W. LINDGREN, 415.
University of Wisconsin, Madison: C. K. LEITH, 413; L. MARTIN, 118; R. H. WHITBECK, 1072.
Union College, Schenectady: J. H. STOLLER, 1065.
Geophysical Laboratory of the Carnegie Institution of Washington, Washington: A. L. DAY, 341; F. E. WRIGHT, 122.
Lehigh University, South Bethlehem: B. L. MILLER, 1047.
American Museum of Natural History, New York: E. O. HOVEY, 213.
University of California, Berkeley: A. C. LAWSON, 291.
Leland Stanford Junior University, Stanford University: C. F. TOLMAN, 1068.
University of Michigan, Ann Arbor: W. H. HOBBS, 412; E. C. CASE, 191; F. LEVERETT, 141.
Amherst College, Amherst: B. K. EMERSON, 342.
Columbia University, New York: J. F. KEMP, 296; Prof. BERKEY, 400.
Bryn Mawr College, Bryn Mawr: Miss F. BASCOM, 108.
Harvard University, Cambridge: J. E. WOLFF, 127; C. PALACHE, 124; R. A. DALY, 156; P. E. RAYMOND, 1054.
Carnegie Institution of Washington, Washington: C. D. WALCOTT, 119.
Smithsonian Institution, Washington: C. D. WALCOTT, 119; G. P. MERRILL, 327.
Museum of Comparative Zoology, Cambridge: R. A. DALY, 156; P. E. RAYMOND, 1054.
Yale University, New Haven: PIRRSON, 254; BARRELL, 105; LULL, 1042; IRVING, 1023; SCHUCHERT, 172.
Boston Society of Natural History, Boston: R. A. DALY, 156.
Geological Society of America, New York: E. A. SMITH, 1058; W. N. DAVIS, 1013; E. O. HOVEY, 213.
Le Conte Club, Berkeley: A. C. LAWSON, 291.
American Geographical Society of New York, New York: W. LIBBEY, 1036; D. R. MACIVER, 1053; L. DOMINIAN, 148.
Cornell University, Ithaca: H. RIES 130.
Academy of Natural Science, Philadelphia: E. T. WHERRY, 1136; Miss F. BASCOM, 108.
Colorado Scientific Society, Denver: G. L. CANNON, 1137.
American Academy of Arts and Science, Boston: A. C. LANE, 102.

Members of the Congress.

Argentine.

D. A. Gallardo..... 1135
J. Keidel..... 1138
Museo Nacional de Historia Natural, Buenos-Aires..... 117

Austria.

T. V. Danes..... 224
C. Hlawatsch..... 223
V. de Lozinski..... 360
E. Romer..... 284
F. Slavik..... 298
W. K. Teisseyre..... 301
R. Zuber..... 217

Belgium.

M. Bodart..... 305
L. E. de Buggenoms. 378
R. Cambier..... 377
L. C. A. Legrand.... 421
A. Lemonnier..... 304
Mourlon..... 375
G. T. Paquet..... 265
A. Renier..... 376
P. Zoude..... 203

British Guiana.

J. B. Harrisson..... 1019

British Isles.

R. J. Anderson..... 209
F. E. Armstrong.... 399
G. H. Ashwin..... 1141
J. Ashworth..... 409
Sir A. F. Baker..... 186
J. Borrowman..... 268
F. A. Bather..... 129
L. L. Belinfante..... 125
W. H. Bell..... 210
Miss Bowen-Colthurst 153
H. L. Bowman..... 1005
H. M. Cadell..... 208
J. Cadman..... 423
A. G. Charleton.... 411
C. T. Clough..... 140
G. A. J. Cole..... 187
R. E. Commons..... 205
Miss K. M. Crosse... 111
W. H. Davis..... 355
J. Drugman..... 152
G. L. Dunn..... 370
J. W. Evans..... 136

British Isles—Con'td.

Wm. O. Fearnsides.. 173
C. W. Fennell..... 150
S. McC. Gardner.... 394
W. A Gibb..... 1017
A. Hague..... 1018
A. Harker..... 207
J. A. L. Henderson... 294
Robt. S. Herries.... 164
Mrs. R. S. Herries.. 165
B. Hobson..... 204
Sir T. H. Holland... 345
J. Horne..... 1022
M. Hurll..... 395
J. McG. Hurll..... 396
Iron & Steel Institute, London..... 216
T. J. Jehu..... 211
Miss M. S. Johnston. 112
A. E. Kitson,..... 163
J. Lawrence Hamilton 295
D. A. Louis..... 393
H. Louis..... 1041
A. M. Luttman-Johnson..... 406
H. Marshall..... 1044
Sir H. A. Miers.... 366
R. B. Murray..... 178
P. McIntyre..... 292
B. McNeill..... 229
Mrs. B. McNeill..... 230
T. C. Nicholas..... 367
G. M. Part..... 364
B. N. Peach..... 1051
Sir A. McRobert.... 169
Lady R. W. McRobert 168
Miss C. A.Raisin.... 158
S. H. Reynolds..... 1056
T. E. Sibly..... 1057
W. J. Sollas..... 1125
A. Strahan..... 159
J. J. H. Teall..... 1067
C. W. Turington.... 302
Turnbridge, E. W.... 293
J. M. Wordie..... 137

Bulgaria.

G. Bontchew..... 429

Canada.

F. D. Adams..... 1
Mrs. F. D. Adams... 73
J. A. Allan..... 13
H. M. Ami..... 14
J. W. Astley..... 64

Canada.—Continued.

M. B. Baker..... 15
J. A. Bancroft..... 16
A. E. Barlow..... 3
J. M. Bell..... 75
Léon Benoit..... 277
W. Brainerd..... 85
R. W. Brock..... 2
G. L. Burland..... 77
L. D. Burling..... 56
P. Burns..... 89
A. G. Burrows..... 17
D. D. Cairnes..... 18
R. E. Chambers..... 61
C. Camsell..... 19
T. Cantley..... 90
P. P. Choquette.... 94
A. A. Cole..... 20
A. P. Coleman..... 4
E. Coste..... 21
J. L. Côte..... 419
P. Cox..... 1127
T. E. Denis..... 5
W. J. Dick..... 414
D. B. Dowling..... 22
J. A. Dresser..... 23
S. Dufault..... 1126
P. E. Dulieux..... 24
A. Eubank..... 380
R. D. Falconer..... 25
E. R. Faribault..... 26
B. E. Fernow..... 63
W. F. Ferrier..... 27
O. S. Finnie..... 66
T. J. Flynn..... 143
J. D. Fraser..... 98
H. Frechette..... 71
C. Galloway..... 87
Th. W. Gibson..... 1144
W. L. Goodwin..... 28
R. P. D. Graham.... 60
Abbé C. R. Guimont. 30
John I. Gwillim..... 78
B. Haanel..... 72
E. Haanel..... 31
A. Hardy..... 91
A. E. T. Haultain... 74
E. Haycock..... 32
R. R. Hedley..... 33
J. E. Hyde..... 82
E. D. Ingall..... 34
G. Jarvis..... 416
W. A. Johnston..... 90
R. A. A. Johnston... 35
J. Keele..... 36
E. M. Kindle..... 37
S. F. Kirkpatrick.... 145

Canada—Continued.

C. W. Knight..... 38
Rev. A. Lajeunesse.. 1031
R. B. Lambe..... 76
L. M. Lambe..... 40
W. W. Leach..... 41
W. S. Lecky..... 12
O. E. LeRoy..... 6
G. G. S. Lindsay.... 7
G. H. Ling..... 1145
W. T. MacClement.. 1148
J. D. MacKenzie.... 386
G. C. MacKenzie... 88
A. S. MacKenzie... 1118
R. G. McConnell.... 43
R. McConnell..... 93
J. McEvoy..... 44
Rev. J McGuire.... 1045
W. McInnes..... 8
D. S. McIntosh.... 365
John McLeish..... 45
J. G. McMillan..... 58
W. H. McNairn.... 99
A. Mailhiot..... 68
G. Malloch..... 81
G. F. Matthew..... 42
W. G. Miller..... 9
H. Mortimer-Lamb.. 39
T. C. Murray..... 62
T. H. Mullens..... 1129
W. Nicol..... 46
J. Obalski..... 79
W. A. Parks..... 10
J. B. Porter..... 47
M. E. Purcell..... 92
L. A. Ray 417
W. F. Robertson.... 48
W. R. Rogers..... 69
F. H. Sexton..... 49
H. S. de Schmid..... 70
F. B. Smith..... 65
J. Stansfield..... 59
J. T. Stirling..... 50
J. C. Sutherland..... 84
A. Tarrut..... 1143
A. J. Tonge..... 176
E. W. Thomson.... 95
J. B. Tyrrell..... 11
J. H. Valiquette..... 57
T. L. Walker..... 51
R. C. Wallace..... 52
E. B. Webster..... 83
K. Weiss 97
J. White..... 53
A. B. Willmott..... 54
A. E. Wilson..... 96
A. W. G. Wilson.... 67
E. R. Wood..... 86
G. A. Young..... 55

Denmark.

O. B. Böggild..... 218
V. Madsen..... 356

Egypt.

W. F. Hume. 206

France.

P. C. d'Almeida.. . 323
C. Barrois..... 368
A. Briquet..... 424
P. C. E. Bertrand... 369
A. Bigot..... 215
J. Caillebotte..... 351
Léon Cares..... 246
Mme B. Cares..... 245
H. St. Clivier..... 350
Comité Central des Houillères de France, Paris..... 116
G. Delépine..... 110
E. Fallot..... 288
L. Fèvre..... 322
L. E. Gentil..... 374
G. R. Gontand..... 184
Comte A. de Gramont 221
A. Hermann... 382
J. Hermann..... 383
M. Kilian..... 1028
A. Lacroix..... 331
P. Lemoine..... 255
P. Lory..... 263
M. Lyon.... 183
S. Meunier.. 1149
L. Michalon. 299
P. Nicou..... 422
P. Pruvost..... 262
L. Raveneau..... 381
Société Française de Minéralogie, Paris 190
Mlle M. Termier... 188
P. M. Termier..... 189
A. Thevenin..... 272

Germany.

H. Arlt..... 276
R. Bärtling..... 274
R. Beck..... 334
E. W. Benecke..... 314
A. Bergeat..... 1139
W. A. Bergt..... 199
K. Boden..... 312
H. E. Boeke..... 198
A. Dannenberg..... 358
K. E. Dittman..... 193
E. Esch. 1109
Geologisches Institut der Kgl. Technischen Hochschule Aachen..... 359
Dr. Greim..... 174
Grosshersogl, Hessische Geologische Landesanstalt, Darmstadt..... 1089

Germany—Continued.

F. von Grote..... 426
G. Gürich..... 1116
Gutehoffnungshütte, Aktienverein fur Bergbau und Hüttenbetrieb, Oberhausen..... 114
H. Hamm..... 390
C. A. Haniel..... 196
F. Heise..... 273
E. Kayser..... 194
G. Klemm..... 1029
P. G. Krause..... 281
Dr. Krusch..... 1030
P. Kukuk..... 238
R. Lepsius..... 316
H. F. P. Lück..... 283
A. Macco..... 391
S. G. Martin..... 332
L. Milch..... 1122
H. Müller..... 248
K. Oebbeke..... 338
W. Paulcke..... 1140
Dr. Penck..... 387
K. Pietzsch..... 278
F. Plieninger..... 339
J. E. Pompeckj..... 1104
A. Rathge..... 388
A. J. Riedel..... 280
C. H. F. Rosenbusch. 1112
Dr. Salomon..... 1062
R. Scheibe..... 389
A. Schenck..... 315
W. Schilling..... 279
Miss A. Steinmann.. 1113
G. Steinmann..... 401
H. Stille..... 1064
E. Stolley..... 242
O. Stutzer..... 244
N. Tilmann..... 241
Verein deutscher Eisenhüttenleute, Düsseldorf..... 287
Verein für die bergbaulichen Interessen im Oberbergamtsbezirk Dortmund, Essen (Ruhr)..... 282
M. Weber..... 200
B. Weigand..... 243
O. Welter..... 201
E. A. Wepfer..... 197
O. Wilckens..... 337
L. Wolff..... 1110
T. F. W. Wolff..... 249
E. Zimmermann..... 398

Greece.

P. Negris..... 427

Guatemala.

G. N. Morang..... 1049

Hungary.

L. Lócsy de Lócs... 1039
F. Schafarsik..... 1131
J. Sádecsky de Sádecsne..... 252

India.

L. L. Fermor..... 300

Italy.

S. Cerulli-Irelli..... 310
G. Dainelli..... 225
I. Friedlaender..... 195
I. Marengo..... 264
I. Mattirolo..... 3[illegible]
G. Merciai..... 267
A. Portis..... 309
P. Vinassa de Régny. 250
F. Sacco..... 226
C. Segré..... 266
Società Geologica Italiana, Rome... 372
C. de Stefania..... 349
Regia Ufficio Geologica d'Italia, Rome. [illegible]71

Japan.

J. Milne..... 1150
H. Yabe..... 286

Manchuria.

C. Kido..... 251

Mexico.

C. Burckhardt..... 259
H. W. Hixon..... 256
Sociedad Cientifica "Antonio Alzate", Mexico..... 219
Sociedad Mexicana de Geografia y Estadistica, Mexico... 1111

Netherland.

E. C. Abendanon... 1142
G. A. H. Molengraaff 1048
A. Stoop..... 115

New Zealand.

P. Marshall..... 317

Norway.

O. Holtedahl... 405

Peru.

C. I. Lisson, ... 1132

Portugal.

F. F. Roquette..... 247

Roumania.

L. Mrazek.. 340

Russia.

W. Archinow..... 237
H. L. Borgström.. . 1146
A. S. Guinsberg..... 379
H. Hausen..... 1153
F. Loewison-Lessing . 397
M. Luboschinsky... 363
A. W. Pavlow..... 239
D. Rudnev..... 320
J. W. Samojloff.... 333
W. Smirnoff..... 336
P. Soustchinsky..... 240
Stepanow..... 1152
I. N. Strigeoff..... 253
M. Tchernicheff..... 1066
W. Vernadsky..... 179

Spain.

Sr. D. Marin y Bertran de Lis..... 403
E. Dupuy de Lôme.. 402
Sr. D. L. de Adaro y Magro 404
Sociedade de Geografia, Lisboa..... 113
Sociedad de Geografia Comercial, Barcelona..... 228

Sudan.

G. W. Grabham.... 335

Sweden.

H. Backström..... 260
L. E. T. Dahlblom. 361
Baron G. de Geer... 222
N. O. Holst..... 362
S. P. Quensel..... 328
Mrs. Quensel..... 329
C. I. F. Skottsberg.. 347

Switzerland.

H. Brockmann-Jerosch 325
H. L. Rollier..... 326
H. Schardt 428

Philippine Islands, U.S.A.

F. A. Dalburg..... 308

Tasmania.

C. F. Heathcote..... 318

Trinidad.

J. Cadman..... 423

Turkey.

L. Dominian..... 148

Union of South Africa.

A. L. Hall..... 1115
E. T. Mellor..... 352
H. W. Smyth..... 1061

United States of America

O. Andersen..... 1151
G. H. Ashley..... 1001
H. F. Bain..... 170
J. Barrell..... 105
W. L. Barrows..... 101
Miss F. Bascom..... 108
G. F. Becker..... 1003
Prof. Berkey..... 400
S. W. Beyer... 167
A. C Boyle..... 1006
J. C. Branner.. . . . 133
A. H. Brooks..... 258
S. C. Browne..... 234
H. G. Bryant.... ... 385
W. H. Bucher.... 343
M. R. Campbell..... 1010
G. L. Cannon 1137
Carnegie Library of Pittsburg..... 269
E. C. Case..... 191
Mrs. E. C. Case..... 192
T. C. Chamberlin.... 1012
H. M. Chance..... 120
R. H. Chapman..... 236
F. G. Clapp..... 175
W. B. Clark..... 107
J. M. Clarke..... 161
H. T. Cleland..... 121
C. R. Corning..... 104
John Crerar Library, Chicago..... 149
W. Cross.... .. 1011
H. P. Cushing..... 126
R. A. Daly..... . 156
W. M. Davis... . 1013
A. L. Day..... 341
L. Dominian..... 148
J. Douglas..... 146
H. N. Eavenson.... 354

United States of America —Continued.

H. Eckfeldt..... 155
B. K. Emerson..... 342
W. H. Emmons..... 303
H. L. Fairchild..... 109
C. N. Fenner..... 257
P. Geijer..... 232
A. C. Gill..... 103
Miss W. Goldring..... 134
J. W. Goldthwait..... 285
C. E. Gordon..... 181
C. N. Gould..... 311
A. Hague..... 1018
Ch. Hartnagel..... 346
Miss L. Hatch..... 171
A. O. Hayes..... 321
R. R. Hice..... 357
T. McD. Hills..... 157
C. H. Hitchcock..... 180
W. H. Hobbs..... 412
Prof. Sturgis-Hooper 1021
T. C. Hopkins..... 348
R. E. Hore..... 154
R. F. Van Horn..... 270
Mrs. E. O. Hovey..... [illegible]
E. O. Hovey..... [illegible]
E. Howe..... 227
J. P. Iddings..... 321
Prof. Irving..... 1023
E. C. Jacobs..... 1024
G. F. Kay..... 1025
A. Keith..... 1026
Mrs. J. F. Kemp..... 297
J. F. Kemp..... 296
Ch. Keyes..... 330
G. F. Kunz..... 107
Mrs. A. C. Lane..... 182
A. C. Lane..... 102

United States of America —Continued.

A. C. Lawson..... 291
J. H. Lees..... 1033
C. K. Leith..... 413
A. G. Leonard..... 353
F. Leverett..... 141
W. Libbey..... 1036
W. Lindgren..... 415
G. D. Louderback..... 177
Prof. Lull..... 1042
M. Manson..... 290
L. Martin..... 118
W. W. Mein..... 233
G. P. Merrill..... 327
B. LeRoy Miller..... 1047
A. M. Miller..... 160
D. R. McIver..... 1053
New York State Museum, Albany. 418
R. Van Asdale Norris 144
H. F. Osborn..... 147
L. O. Packard..... 344
C. Palache..... 124
E. B. Peck..... 373
R. A. E. Penrose..... 324
G. H. Perkins..... 128
L. Pirsson..... 254
S. Powers..... 307
C. S. Prosser..... 139
F. L. Ransome..... 151
P. E. Raymond..... 1054
W. N. Rice..... 185
J. W. Richards..... 202
H. Ries..... 130
School of Mines and Metallurgy, Rolla. 116
C. Schuchert..... 172
F. Searls..... 275

United States of America —Continued.

E. A. Smith..... 1058
G. O. Smith..... 1059
W. D. Smith..... 1060
C. R. Stauffer..... 261
J. J. Stevenson..... 319
R. Stokes..... 235
J. H. Stoller..... 1065
Miss M. Talbot..... 123
F. B. Taylor..... 408
E. Teller..... 271
C. F. Tolman..... 1068
W. H. Twenhofel..... 407
R. D. Tyler..... 1069
J. A. Udden..... 1070
W. L. Uglow..... 214
T. W. Vaughan..... 410
C. D. Walcott..... 119
Y. T. Wang..... 135
T. L. Watson..... 138
E. T. Wherry..... 1136
R. H. Whitbeck..... 1072
D. White..... 1086
I. C. White..... 132
E. Wigglesworth..... 220
H. S. Williams..... 131
H. V. Winchell..... 142
J. E. Wolff..... 127
J. B. Woodworth..... 289
T. E. Wright..... 122
G. F. Wright..... 306

Uruguay.

Museo de Historia Natural, Montevideo 384

Members.

EXECUTIVE COMMITTEE.—Numbers 1 to 11 inclus ve.

ORGANIZATION COMMITTEE.—Numbers 1 to 11 and 13 to 55 inclusive.

PRESIDENT.—Frank D. Adams, D.Sc., F.R.S., 1.

GENERAL SECRETARY.—R. W. Brock, M.A., F.R.S.C., 2.

SECRETARY.—W. Stanley Lecky, A.R.S.M., 12.

1. FRANK D. ADAMS, D.Sc., F. R. S., Dean of the Faculty of Applied Science and Logan Professor of Geology, McGill University, Montreal, Canada. Delegate of the Royal Society of London, England and of McGill University, Montreal.

73. MRS. FRANK D. ADAMS.

2. R. W. BROCK, M.A., F.R.S.C., Director of the Geological Survey of Canada, Ottawa, Canada. Delegate of the Società di Naturalisti, Naples, Italy.

3. ALFRED E [illegible]BLOW, D. Sc., F.R.S.C., McGill University, Montre[illegible], Canada.

4. A. P. COLEMAN, Ph.D., F.R.S., Professor of Geology, University of Toronto, Toronto, Canada.

5. THEO. C. DENIS, B.A.Sc., Superintendent of Mines for the Province of Quebec, Quebec, Canada. Delegate of the Department of Colonization, Mines and Fisheries, Quebec, Canada.

6. O. E. LeRoy, B.A., M.Sc., Geological Survey, Ottawa, Canada.
7. G. G. S. Lindsey, B.A., K.C., 27 Manning Arcade, Toronto, Canada.
8. William McInnes, B.A., F.R.S.C., Geological Survey, Ottawa, Canada.
9. Willet G. Miller, LL.D., F.R.S.C., Geologist for the Province of Ontario, Toronto, Canada.
10. W. A. Parks, B.A., Ph.D., Department of Geology, University of Toronto, Toronto, Canada.
11. J. B. Tyrrell, M.A., F.R.S.C., 534 Confederation Life Building, Toronto, Canada.
12. W. Stanley Lecky, A. R. S. M., Victoria Memorial Museum, Ottawa, Canada.
13. J. A. Allan, M.Sc., Ph.D., Professor of Geology, University of Alberta, Edmonton, Canada.
14. Henry M. Ami, M.A., D.Sc., 453 Laurier Avenue East, Ottawa, Canada. Delegate of the Royal Society of Canada, Ottawa.
15. M. B. Baker, B.A., B.Sc., Professor of Geology, School of Mining, Kingston, Ontario, Canada. Delegate of the School of Mining, Kingston.
16. J. A. Bancroft, M.A., Ph. D., Associate Professor of Geology, McGill University, Montreal, Canada. Delegate of McGill University, Montreal.
17. A. G. Burrows, M. A., B.Sc., Geologist, Ontario Bureau of Mines, Toronto, Canada.
18. D. D. Cairnes, B.Sc., Ph. D., Geologist, Geological Survey, Ottawa, Canada.
19. Charles Camsell, B.Sc., Geologist, Geological Survey, Ottawa, Canada.
20. Arthur A. Cole, B.Sc., M.A., Mining Engineer to the Timiskaming and Northern Ontario Railway, Cobalt, Ontario, Canada.
21. Eugène Coste, M.E., President and Managing Director, The Canadian Western Natural Gas, Light, Heat and Power Company, Limited, 128 Seventh Avenue East, Calgary, Canada.
22. D. B. Dowling, B.A.Sc., F.R.S.C., Geologist, Geological Survey, Ottawa, Canada.
23. J. A. Dresser, M.A., Manager, Lands Department, The Algoma Central and Hudson Bay Railway Company, Sault Ste. Marie, Ontario, Canada.

24. E. Dulieux, E. M., Graduate École Polytechnique of Paris, Professor of Geology, École Polytechnique (Université Laval), Montreal, Canada.
25. R. D. Falconer, LL.D., President, University of Toronto, Toronto, Canada.
26. E. R. Faribault, B.Sc., F.G.S.A., Geologist, Geological Survey, Ottawa, Canada.
27. W. F. Ferrier, B.A. Sc., F.G.S., Mining Engineer and Geologist, 204 Lumsden Building, Toronto, Canada.
28. W. L. Goodwin, D.Sc., F.R.S.C., Director, School of Mining, Kingston, Ontario, Canada. Delegate of the School of Mining, Kingston, Canada, and of the Institution of Mining Engineers, London, England.
29. R. P. D. Graham, M.Sc., Assistant Professor of Mineralogy, McGill University, Montreal, Canada.
30. R. Guimont, M.A., Ph.L., Professor of Geology, Laval University, Quebec, Canada. Delegate of Laval University, Quebec, Canada.
31. Eugene Haanel, Ph.D., Director of the Mines Branch, Department of Mines, Ottawa, Canada. Delegate of the Mines Branch of the Department of Mines, Ottawa, Canada.
32. E. Haycock, M.A., Professor of Geology, Acadia University, Wolfville, Nova Scotia, Canada.
33. Robt. R. Hedley, Consulting Mining Engineer, 405 Cotton Building, Vancouver, Canada.
34. Elfric D. Ingall, Assoc. R.S.M., Geologist, Geological Survey, Ottawa, Canada.
35. R. A. A. Johnston, Mineralogist, Geological Survey, Ottawa, Canada.
36. Joseph Keele, B.Sc., Geologist, Geological Survey, Ottawa, Canada.
37. E. M. Kindle, A.B., M.S., Ph. D., Invertebrate Palæontologist, Geological Survey, Ottawa, Canada.
38. C. W. Knight, B.Sc., Assistant Provincial Geologist, Ontario Bureau of Mines, Toronto, Canada.
39. H. Mortimer-Lamb, Secretary-Treasurer, Canadian Mining Institute, Montreal, Canada.
40. Lawrence M. Lambe, F.G.S., F.R.S.C., Vertebrate Palæontologist, Geological Survey, Ottawa, Canada. Delegate of the Royal Society of Canada, Ottawa.
41. William W. Leach, B.A.Sc., Geologist, Geological Survey, Ottawa, Canada.
42. G. F. Matthew, LL.D., D.Sc., F.R.S.C., St. John, New Brunswick, Canada.
43. Richard G. McConnell, B.A., Geologist, Geological Survey, Ottawa, Canada.

44. James McEvoy, B.A.Sc., Mining Engineer and Geologist, 123 Bay Street, Toronto, Canada.
45. John McLeish, B.A., Chief of the Division of Mineral Resources and Statistics, Mines Branch, Department of Mines, Ottawa, Canada. Delegate of the Mines Branch of the Department of Mines, Ottawa, Canada.
46. W. Nicol, M.A., Professor of Mineralogy, Queen's University, Kingston, Ontario, Canada. Delegate of the School of Mining, Kingston.
47. J. B. Porter, Ph. D., D.Sc., Professor of Mining Engineering, McGill University, Montreal, Canada. Delegate of the Institution of Mining Engineers, London, Eng.
48. W. Fleet Robertson, B.Sc., Provincial Mineralogist, Victoria, British Columbia, Canada.
49. F. H. Sexton, S.B., Director, Department of Technical Education of Nova Scotia, Halifax, Canada.
50. J. T. Stirling, Chief Inspector of Mines for the Government of the Province of Alberta, Edmonton, Canada.
51. T. L. Walker, M. A., Ph. D., Professor of Mineralogy, University of Toronto, Toronto, Canada.
52. Robert C. Wallace, M. A., Ph. D., D.Sc., F. G. S, Professor of Geology, and Mineralogy, University of Manitoba, Winnipeg, Canada. Delegate of the University of Manitoba, Winnipeg.
53. James White, Secretary, The Commission of Conservation Ottawa, Canada. Delegate of the Royal Society of Canada, Ottawa.
54. A. B. Willmott, M.A., B.Sc., Mining Engineer and Geologist, 404 Lumsden Building, Toronto, Canada.
55. George A. Young, M.Sc., Ph.D., Geologist, Geological Survey, Ottawa, Canada.
56. L. D. Burling, B. S., Geological Survey, Ottawa, Canada.
57. J. H. Valiquette, B.A.Sc., Bureau of Mines, Quebec, Canada. Delegate of the Department of Colonization Mines and Fisheries, Quebec, Canada.
58. J. G. McMillan, B.A.Sc., M.E., 225 Geoffrey Street, Toronto, Canada.
59. J. Stansfield, B.A., M.Sc., F.G.S., 429 Mance Street, Montreal, Canada.
60. R. P. D. Graham, B. A., M.Sc., McGill University, Montreal, Canada.
61. R. E. Chambers, B.A., New Glasgow, Nova Scotia, Canada.
62. J. C. Murray, B.A., B.Sc., 16 Adelaide Street East, Toronto, Canada.
63. B. E. Fernow, LL.D., University of Toronto, Toronto, Canada.

64. J. W. Astley, M.E., 74 St. George Street, Toronto, Canada.
65. F. B. Smith, B.Sc., 42 Jasper Avenue West, Edmonton, Alberta, Canada.
66. O. S. Finnie, B.Sc., Department of the Interior, Canadian Building, Ottawa, Canada.
67. A. W. G. Wilson, Ph. D., Mines Branch, Department of Mines, Ottawa, Canada. Delegate of the Mines Branch of the Department of Mines, Ottawa, Canada.
68. A. Mailhiot, M.E., Professor of Geology, 228 St. Denis Street, Montreal, Canada. Delegate of Laval University, Montreal and École Polytechnique, Montreal
69. W. R. Rogers, B.Sc., Bureau of Mines, Toronto, Canada.
70. S. de Schmid, M.E., Mines Branch, Department of Mines, Ottawa, Canada. Delegate of the Mines Branch of the Department of Mines, Ottawa, Canada.
71. H. Fréchette, M.Sc., Mines Branch, Department of Mines, Ottawa, Canada Delegate of the Department of Mines, Ottawa.
72. B. Haanel, B.Sc., 230 First Avenue , Ottawa, Canada.
73. Mrs. F. D. Adams, McGill University, Montreal, Canada.
74. H. E. T. Haultain, M.I.M.M., Professor of Mining Engineering, University of Toronto, Toronto, Canada.
75. James M. Bell, M.A., Ph.D., "Old Burreside", Almonte, Ontario, Canada.
76. R. B. Lamb, M. E., 703 Traders Building, Toronto, Canada.
77. G. Lewis Burland, B.Sc., 373 Frank Street, Ottawa, Canada.
78. J. C. Gwillim, B.Sc., School of Mining, Kingston, Ontario, Canada.
79. J. Obalski, M.E., Pine Avenue, Apartments A, Montreal, Canada.
80. W. A. Johnston, M.A., B.Sc., Geological Survey, Ottawa, Canada.
81. George S. Malloch, B.Sc., Geological Survey, Ottawa, Canada.
82. J. E. Hyde, B.A., M.A., School of Mining, Kingston, Ontario, Canada.
83. E. B. Webster, M.E., Box 161, Edmonton, Alberta, Canada.
84. J. C. Sutherland, B.A., Department of Public Instruction, Quebec, Canada.
85. W. Brainerd, Ph.B., c/o Canadian Explosives Limited, Montreal, Canada.
86. Edward R. Wood, 26 King Street, East, Toronto, Canada.

87. C. F. J. Galloway, B.Sc., M.E., P.O. Box 121, Vancouver, British Columbia, Canada.
88. G. C. Mackenzie, B.Sc., Mines Branch, Department of Mines, Ottawa, Canada.
89. Patrick Burns, Box 380, Calgary, Alberta, Canada.
90. Thomas Cantley, 2nd Vice-President and General Manager, Nova Scotia Steel and Coal Co., Limited, New Glasgow, Nova Scotia, Canada.
91. Alex. Hardy, Secretary Treasurer, British Columbia Anthracite Syndicate, Hochelaga Bank Building, Quebec, Canada.
92. M. E. Purcell, Superintendent consolidated Mining and Smelting Company of Canada, Rossland, British Columbia, Canada.
93. Rinaldo McConnell, 175 Cooper Street, Ottawa, Canada.
94. Charles Philippe Choquette, M. A., Lic.-ès-sciences, Professeur, College of St-Hyacinthe, St.-Hyacinthe, Quebec, Canada. Delegate of Laval University, Montreal.
95. Edward William Thomson, F. R. S. L., F. R. S. Co., C. E., P. L. S., 360 Bronson Avenue, Ottawa, Canada.
96. Miss Alice E. Wilson, B. A., Geological Survey, Ottawa, Canada.
97. Karl Weiss, Dr. Phil., 150 Hastings Street East, Vancouver, British Columbia, Canada.
98. Joseph Dix Fraser, General Manager Atikokan Iron Co., Ltd., Port Arthur, Ontario, Canada.
99. William Harvey McNairn, M. A., 415 Brunswick Avenue, Toronto, Canada. Delegate of McMaster University, Toronto.
100. Percy Eugene Hopkins, B. A. Sc., Bureau of Mines, Toronto, Canada.
101. W. L. Barrows, M.A., 28 Brownell Avenue, Hartford, Conn., U. S.A.
102. A. C. Lane, Ph.D., Tufts College, Boston, Mass., U.S.A. Delegate of the American Academy of Arts and Science, Boston.
182. Mrs. A. C. Lane.
103. A. C. Gill, Ph.D.,403 Wyckoff Avenue, Ithaca,N.J.,U.S.A.
104. C. R. Corning, Ph.D., M.E., 36 Wall Street, New York City, U.S.A.
105. J. Barrell, E. M., Ph.D., Professor of Geology, Yale University Museum, New Haven, Conn. Delegate of Yale University, New Haven, Conn., U. S. A.

106. W. Bullock Clark, Ph.D., John Hopkins University, Baltimore, Maryland, U. S A.
107. G. F. Kunz, Ph.D., D.Sc., A.M., 409 Fifth Avenue, c/o Tiffany & Co., New York City, U. S. A.
108. Miss F. Bascom, Ph.D., Bryn Mawr College, Bryn Mawr, Penns., U.S.A. Delegate of Bryn Mawr College, Bryn Mawr, and of the Academy of Natural Science of Philadelphia, Philadelphia.
109. H. L. Fairchild, D.Sc., University of Rochester, Rochester, N. Y., U. S. A.
110. G. Delépine, Docteur-ès-sciences, (Abbé), 60 Boulevard Vauban, Lille, France.
111. Miss K. M. Crosse, Caterham Valley, Surrey, England.
112. Miss M. S. Johnston, "Haselwood", Wimbledon Hill, London, S. W., England.
113. Sociedade de Geographia, Lisboa, Spain.
114. Gutehoffnungshütte, Aktienverein für Bergbau und Hüttenbetrieb, Oberhausen, Germany.
115. A. Stoop, Huize "De Ryp" Bloemendaal, Holland.
116. Comité Central des Houillères de France, Paris, France.
117. Museo Nacional de Historia Natural, Buenos Aires, Argentine.
118. L. Martin, A.B., A.M., 135 West Gilman Street, Madison, Wisconsin, U. S. A. Delegate of the University of Wisconsin, Madison, U. S. A.
119. C. D. Walcott, Ph.D., D.Sc., LL.D., Smithsonian Institution, Washington, D.C., U. S. A. Delegate of the Carnegie Institution of Washington, Washington, the Smithsonian Institution, Washington, the United States National Museum, Washington and the Washington Academy of Sciences, Washington.
120. H. M. Chance, C.E., M.D., 837 Drexel Building, Philadelphia, Pennsylvania, U. S. A.
121. H. F. Cleland, B.A., Ph.D., Williams College, Williamstown, Massachusetts, U S. A.
122. F. E. Wright, Ph. D., Geophysical Laboratory, Washington, D. C., U.S.A. Delegate of the Geophysical Laboratory of the Carnegie Institution of Washington, Washington, U. S. A.
123. Miss M. Talbot, B.A., Ph.D., Mount Holyoke College, South Hadley, Massachusetts, U. S. A. Delegate of Mount Holyoke College, South Hadley.
124. C. Palache, Ph. D., 109 Appleton Street, Cambridge, Massachusetts, U.S.A. Delegate of Harvard University, Cambridge, Mass.

125. L. L. Belinfante, M.Sc., Assistant Secretary Geological Society, Burlington House, London, W., England.
126. H. P. Cushing, Ph.D., Professor of Geology, Western Reserve University, Cleveland Ohio, U. S.A.
127. J. E. Wolff, Ph. D., University Museum, Cambridge, Mass., U.S.A. Delegate of the Harvard University Cambridge, Mass.
128. G. H. Perkins, Ph.D., Litt.D., L.L.D., Burlington, Vermont, U.S.A. Delegate of the State of Vermont Geological Survey, Burlington.
129. F. A. Bather, D.Sc., F.R.S., British Museum, Natural History, London, S. W., England.
130. H. Ries, Ph. D., Professor of Geology, Cornell University, Ithaca, N.Y., U.S.A. Delegate of Cornell University, Ithaca, U. S. A.
131. H. S. Williams, Ph. D., Professor of Geology, Ithaca, N. Y., U.S.A. Delegate of U. S. Geological Survey.
132. I. C. White, A.M., Ph.D., 141 Willey Street, Morgantown, W., Virginia, U. S. A.
133. J. C. Branner, Ph.D., L.L.D., Professor of Geology, Stanford University, California, U. S. A.
134. Miss W. Goldring, B.A., M.A., 27 Church Street, Wellesley, Massachusetts, U. S. A.
135. Y. Tsenshan Wang, B.Sc., M.A., Hartley Hall, Columbia University, New York City, U. S. A.
136. J. W. Evans, D.Sc., L.L.B., F.G.S., 75 Craven Park Road, Harlesden, London, N. W., England. Delegate of the Geologists' Association, London, England.
137. J. M. Wordie, B.A., F.G.S., St. John's College, Cambridge, England.
138. T. L. Watson, M.S., Ph.D., Professor of Geology, University of Virginia, Charlottesville, Virginia, U.S.A. Delegate of the Virginia Geological Survey and of the University of Virginia, Charlottesville.
139. C. S. Prosser, D.Sc., Ph.D., Professor of Geology, Ohio State University, Columbus, Ohio, U. S. A.
140. C. T. Clough, M.A., F.G.S., 33 George Square, Edinburgh, Scotland.
141. F. Leverett, B.S., 1724 South University Avenue, Ann Arbor, Michigan, U.S.A. Delegate of the U.S. Geological Survey and of the University of Michigan, Ann Arbor.
142. Horace V. Winchell, B.S., 505 Palace Building, Minneapolis, Minnesota, U.S.A. Delegate of the Mining and Metallurgical Society of America, New York.

143. THOMAS J. FLYNN, Cobalt, Ontario, Canada.
144. R. VAN ARSDALE NORRIS, E.M., 520 Second National Bank Building, Wilkes-Barre, Pa., U. S. A.
145. S. F. KIRKPATRICK, M.Sc., 84 Gore St., Kingston, Ontario, Canada.
146. DR. J. DOUGLAS, 99 John Street, New York, U. S. A.
147. H. F. OSBORN, Sc.D., LL.D., D.Sc., 77th Street and Central Park West, New York City, U. S. A. Delegate of the Linnean Society of London, England.
148. L. DOMINIAN, B.A., Broadway at 156th Street, New York, U.S.A. Delegate of the American Geographical Society of New York and of Robert College of Constantinople, Turkey.
149. JOHN CRERAR LIBRARY, Chicago, Illinois, U. S.A.
150. C. W. FENNELL, Ivy Lodge, Sandal, Wakefield, England.
151. F. L. RANSOME, Ph.D., U. S. Geological Survey, Washington, D.C. Delegate of Government of the U. S. A.
152. J. DRUGMAN, Ph.D., M.Sc., 13 Chalfont Road, Oxford, England.
153. MISS PEGGY DE B. F. BOWEN-COLTHURST, Bedford College, London, England.
154. R. E. HORE, B.A., Michigan College of Mines, Houghton, Michigan, U. S. A.
155. H. ECKFELDT, B.Sc., E.M., 438 Seneca Street, South Bethlehem, Pennsylvania, U. S. A.
156. R. A. DALY, Ph.D., 23 Hawthorne Street, Cambridge, Massachusetts, U.S.A. Delegate of Harvard University, Cambridge, the Museum of Comparative Zoology, Cambridge and the Boston Society of Natural History, Boston.
157. T. McD. HILLS, Ph.B., Geological Department, Ohio State University, Colombus, Ohio, U. S. A.
158. MISS C. A. RAISIN, D.Sc., Bedford College, Baker Street, London, W., England. Delegate of the Linnean Society of London.
159. AUBREY STRAHAN, Sc.D., F.R.S., 28 Jermyn Street London, S.W., England. Delegate of the Geological Survey of Great Britain, the Geological Society of London, and of the Board of Education, London.
160. A. M. MILLER, A. M., State University, Lexington, Kentucky, U. S. A.
161. JOHN M. CLARK L.L.D., Ph.D., Sc.D., New York State Geological Survey, Albany, New York, U. S. A. Delegate of the Geological Survey of New York, Albany.
162. MRS. JOHN M. CLARKE.

163. A. E. Kitson, F.G.S., F.R.G.S., I.M.E., "Eadsleigh" 109 Worple Road, Wimbledon, London, S. W., England. Delegate of the University of Glasgow.

164. R. S. Herries, M.A., F.G.S., St. Julians, Sevenoaks, England.

165. Mrs. R. S. Herries.

166. School of Mines and Metallurgy, Rolla, Missouri, U. S. A.

167. S. W. Beyer, B.S., Ph.D., Iowa State College, Ames, Iowa, U. S. A.

168. Lady R. McRobert, B.Sc., c/o Messrs. Brown Shipley and Co., 123 Pall Mall, London, England.

169. Sir A. McRobert, L.L.D., F.R.G.S., Douneside, Tarland, Aberdeenshire, Scotland.

170. H. F. Bain, Ph.D., 420 Market Street, San Francisco, California, U.S.A.

171. Miss Laura Hatch, M.Sc., Denbigh Hall, Bryn Mawr, Pa., U. S. A.

172. Prof. C. Schuchert, Yale University, New Haven, Conn., U. S. A. Delegate of Yale University, New Haven.

173. W. G. Fearnsides, M.A., F.G.S., 419 Glisson Road, Cambridge, England.

174. Prof. Dr. Greim, Martinstrasse 38, Darmstadt, Hessen, Germany.

175. Frederick G. Clapp, S.B., 331 4th Avenue, Pittsburg, Pa., U. S. A.

176. A. J. Tonge, M.E., Dominion Coal Company, Glace Bay, Nova Scotia, Canada.

177. G. D. Louderback, Ph. D., Berkerley, California, U.S.A.

178. R. B. Murray, Elmshurst, Trelawney Road, Camborne, Cornwall, England.

179. Prof. Dr. W. Vernadsky, Geological and Minerological Museum, St. Petersburg, Russia. Delegate of the Société Impériale des Naturalistes de Moscou, Moscou.

180. C. H. Hitchcock, L. L. D., Honolulu, Hawaii, U.S.A.

181. C. E. Gordon, B.S., A.M., Ph.D., Massachusetts Agricultural College, Amherst, Mass., U.S.A.

182. Mrs. A. C. Lane, 22 Arlington Street, Cambridge, Massachusetts, U. S. A.

183. Max Lyon, 83 Avenue du Bois de Boulogne, Paris, France.

184. G. R. Gontand, Rue Louis Philippe, 18, Neuilly-sur-Seine, France.

185. W. N. Rice, Ph.D., L.L.D., Professor of Geology, Wesleyan University, Middletown, Connecticut, U.S.A. Delegate of Wesleyan University, Middletown.

186. Sir Augustine F. Baker, 56 Merrion Square, Dublin, Ireland.

187. G. A. J. Cole, Director of the Geological Survey of Ireland, Royal College of Science, Dublin, Ireland. Delegate of the Government of Great Britain and of the Geological Survey of Ireland, Dublin.

188. P. M. Termier, Directeur du Service de la Carte Géologique de la France, 164 rue de Vaurigard, Paris XV, France. Delegate of the Service de la Carte Géologique de la France, the Société Française de Minéralogie, the École Polytechnique, Paris, and of the Association Amicale des Élèves de l'École Nationale Supérieure des Mines, Paris.

189. Mlle. M. M. Termier, 164 rue de Vaugirard, Paris XV, France.

190. Société Française de Minéralogie, Paris, France.

191. E. C. Case, A.B., M.A., M.S., Ph.D., University of Michigan, Ann Arbor, Michigan, U.S.A. Delegate of the University of Michigan, Ann Arbor.

192. Mrs. E. C. Case, University of Michigan, Ann Arbor, Michigan, U.S.A.

193. K. E. Dittmann, Dr.-Ing., Dreilindenstrasse 63, Essen-Ruhr, Germany.

194. Prof. E. Kaser, Geheimer Regierungsrat, Universität, Marburg i. Hessen, Germany.

195. Immanuel Friedlaender, Via Luigia Sanfelice, Villa Hertha, Napoli, Italy.

196. Dr. C. A. Haniel, Venusbergweg 8, Bonn a. Rh., Germany.

197. E. A. Wepfer, Dr.phil., Jacobstrasse 56, Freiburg i. B., Germany.

198. Prof. Dr. H. E. Boeke, Mineralogisches Institut, Domstrasse 5, Halle a. S., Germany. Delegate of the Vereinigte Friedrichs Universität Halle-Wittenberg, Halle a. S., and of the Naturforschende Gesellschaft zu Halle, Halle a. S.

199. Prof. Dr. W. A. Bergt, Gräfestr. 34, Leipzig-Eutritzsch, Germany.

200. Prof. M. Weber, Dr.Ph., Dr. med., Technische Hochschule, München, Germany.

201. Otto A. Welter, Dr. Phil., Beringstr. 4, Bonn a. Rh., Germany.

202. J. W. Richards, A.C., Ph. D., Lehigh University, South Bethlehem, Pennsylvania, U.S.A.

203. Paul L. G. Zoude, Ingénieur civil des Mines, 109 Boulevard de Grande Ceinture, Bruxelles, Belgium. Delegate of the Société Géologique de Belgique, Liège.

204. B. Hobson, M.Sc., F.G.S., Thornton, Hallamgate Road, Sheffield, England. Delegate of Sheffield University, Sheffield.

205. R. E. Commans, Sandycroft, Speer Road, Thames Ditton, England.

206. W. F. Hume, D.Sc., F.R.S.E., F.G.S., A.R.S.M., Geological Survey, Dawawine P.O., Cairo, Egypt.

207. A. Harker, M.A., F.R.S., St. John's College, Cambridge, England. Delegate of the Royal Society of London and of the University of Cambridge.

208. H. M. Cadell, B.Sc., F.R.S.E., Grange, Linlithgow, Scotland. Delegate of the Royal Scottish Geographical Society, Edinburgh.

209. R. J. Anderson, M.A., M.D., M.R.G.S., Professor of Geology, University College, Galway, Ireland. Delegate of the University College, Galway.

210. W. Heward Bell, Cleeve House, Melksham, England.

211. T. J. Jehu, M.A., M.D., B.Sc., F.R.S.E., F.G.S. The University, St. Andrews, Scotland. Delegate of the University of St. Andrews.

213. E. O. Hovey, A.B., Ph.D., 115 West 84th Street, New York, U.S.A. Delegate of the American Museum of Natural History of New York and of the Geological Society of America, New York.

214. W. L. Uglow, B.A., M.A., B.Sc., M.S., Department of Geology, University of Wisconsin, Madison, Wisconsin, U.S.A.

215. A. Bigot, Doyen de la Faculté des Sciences de l'Université de Caen, 28 rue de Geôle, Caen, France.

216. Iron & Steel Institute, 28 Victoria Street, London, S. W., England.

217. Prof. Dr. R. Zuber, Universität, Lemberg, Austria. Delegate of the K.K. Franzens Universität, Lemberg.

218. Prof. O. B. Böggild, Mineralogical Museum, Copenhagen, Denmark. Delegate of the Government of Denmark, the Dansk Geologisk Forening, Copenhagen and of the Commissionen for Ledelsen af geologiske og geographiske Undersögelser i Grönland, Copenhagen.

219. Société Scientifique "Antonio Alzate" Mexico, Mexico.

220. E. Wigglesworth, M.A., Geological Museum, Cambridge, Mass., U. S. A.

221. Comte A. A. de Gramont, Docteur-ès-Sciences, 179 rue de l'Université, Paris, France.
222. Prof. Baron G. de Geer, Högskola, Stockholm, Sweden.
223. Dr. C. Hlawatsch, XIII/5, Linzerstrasse 456, Wien, Austria.
224. Dr. T. V. Danes, Prof. à l'Université Tchèque, Kremencová, 6, Prague, Bohème, Austria.
225. Dr. Giotto Dainelli, Piazza S. Marco 2, Florence, Italy.
226. F. Sacco, Dr. Prof., R. Politechnico, Castello del Valentino, Torino, Italy.
227. E. Howe, M.A., Ph.D., 77 Rhode Island Avenue, Newport, R. I., U. S. A.
228. Sociedad de Geografia Comercial de Barcelona, Plaza Sta. Ana 4, Barcelona, Spain.
229. Bedford McNeill, A.R.S.M., M.Inst. M.M., 1 London Wall Buildings, London, E. C., England.
230. Mrs. Bedford McNeill, 1 London Wall Buildings, London, E. C., England.
231. Albert O. Hayes, M.Sc., 112 Mercer St., Princeton, New Jersey, U. S. A.
232. Per Geijer, Ph. D., University of Stockholm, Djursholm, Sweden. Delegate of Stockholms Högskola, Stockholm
233. W. W. Mein, M.E., 43 Exchange Place, New York, U. S. A.
234. S. C. Browne, 43 Exchange Place, New York, U. S. A.
235. Ralph S. G. Stokes, c/o C.W. Merrill, Merrill Metallurgical Co., 121 Second Street, San Francisco, U.S.A.
236. R. H. Chapman, U. S. Geological Survey, Washington, D. C., U. S. A.
237. W. Archinow, Directeur de l'Institut Pétrographique "Lithogaea," Ordynka 32, Moscow, Russia. Delegate of the Société Impériale des Naturalistes de Moscou, Moscou.
238. Paul Kukuk, Königl. Bergassessor a.D., Bergstrasse 135, Bochum i. W., Germany. Delegate of the Westfälische Berggewerkschaftskasse, Bochum i. W.
239. A. W. Pavlow, Professeur de l'École Supérieure des Ingénieurs, Sushovskaja 9, N. 69, Moscow, Russia.
240. Pierre Soustchinsky, Professeur à l'École Polytechnique, Nowotscherkassk, Russia.
241. N. Tilmann, Dr. Phil., Lennéstrasse 19, Bonn a. Rhein, Germany.
242. Prof. E. Stolley, Dr. Phil., Technische Hochschule, Braunschweig, Germany.

243. Prof. B. Weigand, Dr. Phil., Schiessrain 7, Strassburg i. Elsass, Germany. Delegate of the Oberrheinischer Geologischer Verein, Stuttgart.
244. Prof. Dr. O. Stutzer, Bergakademie, Freiberg i. Sa., Germany.
245. Madame B. Carez, 18 rue Hamelin, Paris, France.
246. Léon Carez, Dr-ès-sciences, 18 rue Hamelin, Paris, France.
247. F. Ferreira Roquette, Inspecteur Général des Mines, Président du Service Géologique du Portugal, rue de Arco a Jesus 113, Lisbonne, Portugal.
248. H. Müller, Dipl. Ing., Essen-Ruhr, Germany.
249. Prof. Dr. Th. F. W. Wolff, Kgl. Landesgeologe, Frohnau b. Berlin, Germany. Delegate of the Königlich Preussische Geologische Landesanstalt, Berlin.
250. Prof. Dr. P. Vinassa de Régny, Regia Università, Parma, Italy. Delegate of the Regia Università degli Studi di Parma, Parma.
251. Chutaro Kido, Superintendent of the Geological Institute of the South Manchuria Railway Company, Dairen, Kantoshu, Manchuria.
252. Dr. Jules Szádeczky de Szádecsne, Kolozsvár, Hungary. Delegate of the Université royale hongroise François-Joseph de Kolozsvár, Kolozsvár.
253. Ivan N. Strigeoff, Mines de Napthe, Grozny, Caucase, Russia.
254. L. V. Pirsson, M. A., Professor of Geology, Yale University, 41 Trumbull Street, New Haven, Conn., U. S. A. Delegate of Yale University, New Haven.
255. Paul Lemoine, docteur-ès-sciences, 5 rue de Medicis, Paris VI, France.
256. H. W. Hixon, Aire Libre, Mexico, Mexico.
257. C. N. Fenner, Ph.D., M. A., M.E., Geophysical Laboratory, Washington, D. C., U. S. A.
258. A. H. Brooks, B.S., U. S. Geological Survey, Washington, D.C., U.S.A. Delegate of the Government of the U. S. A.
259. Dr. C. Burckhardt, 6 a del Ciprés No. 176, Mexico, D. F., Mexico.
260. Dr. H. Bäckström, Professeur de Pétrographie à l'Université de Stockholm, Djursholm, Sweden. Delegate of Stockholms Högskola, Strockholm.
261. C. R. Stauffer, M. A., Ph. D., Adelbert College, Cleveland, Ohio, U. S. A.
262. P. Pruvost, 159 rue Brûle-Maison, Lille, France. Delegate of the Société Géologique du Nord, Lille.

263. P. C. Lory, 6, rue Fantin-Latour, Grenoble, France. Delegate of the Université de Grenoble, Grenoble.
264. P. Marengo, M.E., Via al Capo di Sta Chiara N. 2. Sturla, Genova, Italy.
265. G. T. Paquet, No. 74 Chaussée de Forest, Bruxelles, Belgium.
266. Claudio Segré, Ingénieur en Chef de l'Institut Expérimental des Chemins de fer Italiens de l'État, Rome, Italy.
267. Giuseppe Merciai, Dr., Prof., Instituto Geologico della Regia Università, Pisa, Italy.
268. James Barrowman, M.E., Stoneacre, Hamilton, Scotland.
269. Carnegie Library of Pittsburg, Pittsburg, Penn., U. S. A.
270. F. R. van Horn, B.S., M.S., Ph.D., Case School of Applied Science, Cleveland, Ohio, U. S. A.
271. E. E. Teller, 3321 Sycamore Street, Milwaukee, Wisconsin, U. S. A.
272. Armand Thevenin, docteur-ès-sciences, 19 rue Joseph Bara, Paris, France.
273. Fritz Heise, Prof., Bergschuldirektor, Hernerstrasse 45, Bochum, Germany.
274. Richard Bärtling, Dr.Phil., Königlich Preussische Geologische Landesanstalt, Invalidenstrasse 44, Berlin N4, Germany.
275. Fred Searls, Jr., Goldfield, Nevada, U. S. A.
276. Dr. Hans Arlt, Kgl. Bergassessor, Herzogparkstrasse 2, München, Germany.
277. Léon Benoit, P. O. Box 215. Winnipeg, Manitoba, Can.
278. Dr. Kurt Pietzsch, Talstrasse 35, Leipzig, Germany.
279. Wilhelm Schilling, Hüttendirektor, Gutehoffnungshütte, Oberhausen, Rheinland, Germany.
280. Adolph Johannes Riedel, Gausstrasse 25, Braunschweig, Germany.
281. Prof. Dr. Paul Gustaf Krause, Invalidenstrasse 44, Berlin N4, Germany.
282. Verein für die bergbaulichen Interessen im Oberbergamtsbezirk Dortmund, Essen-Ruhr, Germany.
283. Hugo Fritz Paul Lück, Eilenburgerstrasse 7, Leipzig, Germany.
284. Eugeniusz Romer, Docteur-ès-Sciences, Professeur à l'Université de Lemberg, 25 rue Dlugosza, Lemberg, Austria.
285. James Walter Goldthwait, Ph.D., Darmouth College, Hanover, New Haven, U.S.A.

286. Prof. Hisakatsu Yabe, Geological Institute, Imperial University, Sendai, Japan.

287. Verein deutscher Eisenhüttenleute, Breite Strasse 27, Düsseldorf, Germany.

288. Prof. Emmanuel Fallot, 34 rue Castéja, Bordeaux, France.

289. J. B. Woodworth, Prof. Harvard University, Geological Museum, Cambridge, Massachusetts, U. S. A. Delegate of the Boston Society of Natural History, Boston.

290. Marsden Manson, Ph.D.,C.E., 2010 Gough Street, San Francisco, California, U. S. A.

291. Andrew C. Lawson, B.A., M.A., Ph. D., University of California, Berkeley, California, U. S. A. Delegate of the University of California, Berkeley, and of the LeConte Club, Berkeley.

292. Peter McIntyre, 18 Leinster Avenue, East Sheen, London, S. W., England.

293. E. W. Turnbridge, B. Sc., F. G. S., Rocklands, Woodbourne Road, Edgbaston, Birmingham, England.

294. J. A. L. Henderson, Ph. D., M. E., Devonshire Club, St. James' Street, London, S. W., England.

295. J. Lawrence-Hamilton, M.R.C.S., 30 Sussex Square, Brighton, England.

296. J. F. Kemp, Professor of Geology, Columbia University, New York, U. S. A. Delegate of Columbia University of New York and of the Mining and Metallurgical Society of America, New York.

297. Mrs. J. F. Kemp.

298. Prof.Dr.Frantisek Slovik, Premyslova 9, Praha-Zizkov, Bohème, Austria.

299. Lucien Michalon, Ingénieur des Mines, 96 rue de l'Université, Paris France.

300. L. L. Fermor, D.Sc., A.R.S.M., F.G.S., Geological Survey of India, Calcutta, India. Delegate of the Government of India.

301. Wawrzyniec K. Teisseyre, Dr., Professeur de Géologie et de Paléontologie à l'Université de Lemberg, Austria.

302. C. V. Turington, 15 Radnor Place, Gloucester Square, London, W., England.

303. William Harvey Emmons, A.B., Ph.D., Department of Geology of the University of Minnesota, Minneapolis, U.S.A.

304. Alfred Lemonnier, Ingénieur, 33 rue Prince Albert, Bruxelles, Belgium.

305. Maurice Bodart, Ingénieur des Mines, 25 rue Veydt, Bruxelles, Belgium.

306. George Frederick Wright, A.M., D.D., LL.D., F.G.S.A., 84 Elmwood Place, Oberlin, Ohio, U.S.A.

307. Sidney Powers, B.A., S.M., Technology Chambers, Boston, Mass., U.S.A.

308. Frank Albert Dalburg, B.S., Division of Mines, Bureau of Science, Manila, Philippine Islands, U.S.A.

309. Alessandro Portis, Dr., Professeur de Géologie et de Paléontologie à l'Université de Rome, Rome, Italy.

310. Serafino Cerulli-Irelli, Dr., Maître de conférences de Paléontologie à l'Université de Rome, Istituto Geologico, Regia Università, Roma, Italy.

311. Charles N. Gould, B.S., M.A., Ph.D., F.G.S.A., 408 Terminal Building, Oklahama City, Oklahama, U.S.A.

312. Karl Boden, *Dr.*, Privatdozent für Geologie an der Universität, Geologisches Institut, Alte Akademie, München, Germany.

313. Ettore Mattirolo, Ingénieur en chef des Mines, rue Charles Albert, 45, Torino, Italy. Delegate of the Società Geologica Italiana, Rome.

314. Ernst Wilhelm Benecke, Professor emer., Goethestrasse 43, Strassburg i. E., Germany.

315. Adolf Schenck, Professor Dr., Schillerstrasse 7, Halle a. S., Germany.

316. R. Lepsius, Dr., Geheimer Oberbergrat, Grossherzoglich Hessische Geologische Landesanstalt, Darmstadt, Germany.

317. Patrick Marshall, M.A., D.Sc., University of Otago, Dunedin, New Zealand.

318. Charles F. Heathcote, Tasmania Gold Mine Ltd., Beaconsfield, Tasmania.

319. John James Stevenson, Ph.D., LL.D., emer. Professor of Geology, New York University, 215 West 101st Street, New York, N.Y., U.S.A.

320. Dmitry Rudnev, Professeur, Gr. Dworjanskaja 33, St. Petersburg, Russia.

321. Joseph P. Iddings, Ph.B., Sc.D., U.S. Geological Survey, Washington, D.C. U.S.A. Delegate of the Washington Academy of Sciences, Washington

322. Lucien Fèvre, Ingénieur en chef des Mines, 1, Place Possoz, Paris, France.

323. Pierre Camena D'Almeida, Professeur de géographie à L'Université de Bordeaux, 54, rue de la Croix Blanche, Bordeaux, France.

324. Richard Alexander Fullerton Penrose, A.B., A.M., Ph.D., 460 Bullitt Building, Philadelphia, Penns., U.S.A.

325. Heinrich Brockmann-Jerosch, Dr. Phil., Privatdozent an der Universität Zürich, Kapfsteig 44, Zürich VII, Switzerland.

326. H. Louis Rollier, Dr. Phil., hon. c., Professeur de stratigraphie et paléontologie, Polytechnicum fédéral suisse, Zürich, Switzerland.

327. George Perkins Merrill, Ph.D., Head Curator of Geology, U. S. National Museum, Washington, D.C., U.S.A. Delegate of the U.S. National Museum, Washington, the George Washington University, Washington and the Smithsonian Institution, Washington.

328. Percy Dudgeon Quensel, Dr.Sc., Lecturer in petrographie of the University of Uppsala. Geological Institute, Uppsala, Sweden. Delegate of Geologiska Sektionen, Uppsala.

329. Mrs. Annie Therese Quensel, Dr. Phil., Vasagaten 1, Uppsala, Sweden.

330. Charles Keyes, M.A., Ph.D., 944 Fifth Avenue, Des Moines, Iowa, U. S. A.

331. Alfred Lacroix, D.Sc., Membre de l'Institut, Professeur de minéralogie au Muséum d'Histoire Naturelle, 23, rue Humboldt, Paris XVI, France.

332. Siegfried Götz Matius, Dr. Phil., Assistent am mineralogish-petrographischen Institut der Universität Bonn, Poppelsdorfer Schloss, Bonn a. Rh., Germany.

333. Jacques Samojloff, Professeur de minéralogie, Institut Agronomique Supérieur, Petrowsko-Rasumowskoje, Moscou, Russie. Délégué de la Société Impériale des Naturalistes de Moscou, Moscou et de l'Institut Agronomique Supérieur de Moscou, Moscou.

334. Richard Beck, Oberbergrat, Professor, Dr. h. c., Rektor der Kgl. Bergakademie Freiberg, Freiberg, Sachsen, Germany. Delegate of the Kgl. Sächs. Regierung, Kgl. Sächs. Geologische Landesanstalt, Leipzig, Kgl. Sächs Bergakademie, Freiberg and of the Freiberger Geologische Gesellschaft, Freiberg.

335. George Walter Grabham, M. A., F. G. S., Government Geologist, P. O. Box 178, Khartoum, Anglo-Egyptian Sudan.

336. Woldemar Smirnoff, Professeur de Pédologie à l'Institut agronomique supérieur, Nowo-Alexandria, Gouvernement Lublin, Russia.

337. Otto Wilckens, Dr. Phil., Professor an der Universität Jena, Reichardstieg 4, Jena, Germany. Delegate of the Grossherzogl. und Herzogl. Gesamtuniversität, Jena.

338. Konrad Oebbeke, Dr. Phil., Geheimer Hofrat, Professor der Geologie und Mineralogie an der Kgl. Technischen Hochschule, München, Germany.

339. Felix Plieninger, Dr. Phil., Professor an der Kgl. Württembergischen Landwirtschaftlichen Hochschule, Hohenheim bei Stuttgart, Württemberg, Germany.

340. Louis Mrazec, Professeur à l'Université, Directeur de l'Institut Géologique de Roumanie, 2, Chausée Kiseleff, Bucarest, Roumania.

341. Arthur L. Day, Ph. D., Geophysical Laboratory, Washington, D. C., U. S. A. Delegate of the Geophysical Laboratory of the Carnegie Institution of Washington, Washington.

342. Benjamin K. Emerson, Professor of Geology in Amherst College, Amherst, Mass., U. S. A. Delegate of Amherst College, Amherst.

343. Walter H. Bucher, Dr., Assistant, Geological Department of the University of Cincinnati, 2642 Eden Avenue, Cincinnati, Ohio, U. S. A.

344. Leonard O. Packard, B. S., Boston Normal School, The Fernway, Boston, Mass., U. S. A.

345. Sir Thomas Henry Holland, K. C., I. E., D. Sc., F. R. S. Alderley Edge, Cheshire, England. Delegate of the Manchester Literary and Philosophical Society, Manchester.

346. Chris. Hartnagel, B. S., Pd.B., A. M., Education Building, (State Museum), Albany, U. S. A.

347. Carl Johan Frederik Skottsberg, D. Sc., Maître de conférences à l'Université, Uppsala, Sweden.

348. Thomas Cramer Hopkins, Ph. D., Professor of Geology, Syracuse University, Syracuse, N.Y., U. S. A.

349. Carlo de Stefania, Professeur del R. Instituto i studi superiori di Firenzi, via Gina Cappino 3, Florence, Italy. Delegate of the R. Accademià dei Lincei, Rome.

350. Hubert Saint-Clivier, Elève à l'École Nationale supérieure des Mines, 134, Boulevard Saint-Germain, Paris, France.

351. Jean Caillebotte, Elève à l'École Nationale supérieure des Mines, 9, rue Scribe, Paris, France.

352. Edward Thomas Mellor, D.Sc., F. R. S. S. Af., 11 Park Road, Alexandra Park, Manchester, England. Also of the Geological Survey of South Africa. Delegate of the Geological Survey of South Africa and of the Geological Society of South Africa, Johannesburg.

353. Arthur Gray Leonard, B.A., Ph.D., State Geologist and Professor of Geology, University of North Dakota, Grand Forks, N.D., U. S. A. Delegate of the University of North Dakota, Grand Forks.

354. Howard N. Eavenson, C.E., McDowall Co., Gary, W. Va., U. S. A.

355. William Henry Davis, Ivy Home, Goodnestone, W. Canterbury, England.

356. Victor Madsen, Directeur du Service géologique du Danemark, 10 Kastanienwej, Copenhagen, Denmark. Délégué du Service géologique du Danemark.

357. Richard R. Rice, Beaver, Penna., U. S. A.

358. Arthur Dannenberg, Dr. Phil., Professor an der Kgl. Technischen Hochschule, Rudolfstrasse 35, Aachen, Germany. Delegate of the Geologisches Institut der Technischen Hochschule, Aachen.

359. Geologisches Institut Der Königl. Technischen Hochschule Aachen, Aachen, Germany.

360. Valery De Lozinski, Dr., Bibliothèque de l'Université, 5, rue Mochnacki, Lemberg, Galicie, Austria.

361. Lorent Edward Theodor Dahlblom, Bergmästare in Gefle-Dala district, Falun, Sweden.

362. N. Olof Holst, Géologue au Service géologique de Suède, Jamshogsby, Sweden.

363. Mark Luboschinsky, Géologue-Agronome, Institut Supérieur Agromonique, Petrowsko-Rasumowskoje, Moscou, Russia.

364. Gerald Meyrick Part, F.G.S., Trinity College, Cambridge, England.

365. Donald Sutherland McIntosh, B.A., M.Sc., Dalhousie University, Halifax, Nova Scotia, Canada. Delegate of Dalhousie University, Halifax, and of the Nova Scotian Institute of Science, Halifax.

366. Sir Henry Alexander Miers, D.Sc., F.R.S., 23 Wetherby Gardens, London, S.W., England. Delegate of the British Association for the Advancement of Science, London.

367. Tiessilian Charles Nicholas, B.A., Trinity College, Cambridge, England.

368. Charles Barrois, Professeur à l'Université de Lille, 41 rue Pascal, Lille, France. Delegate of the Service de la Carte Géologique de la France, Paris, and of the Société Française de Minéralogie, Paris.

369. Paul Charles Édouard Bertrand, Docteur-ès-sciences, Maître de conférences à l'Université de Lille, 159 rue Brule Maison, Lille, Nord, France.

370. George Loudon Dunn, M.E., Annanhill, Kilmarnock, Scotland.

371. Regia Ufficio Geologico D'Italia, Via S. Susanna 13, Rome, Italy.

372. Società Geologica Italiana, Via S. Susanna 13, Rome, Italy.

373. Frederick B. Peck, Lafayette College, Easton, Pennsylvania, U.S.A.

374. Louis Émile Gentil, Professeur à l'Université de Paris, 38 bis rue Denfert-Rochereau, Paris V, France. Delegate of the Université de Paris, Paris.

375. Michel Mourlon, Directeur honoraire du Service géologique et membre de l'Académie royale des Sciences de Belgique, 107 rue Belliard, Bruxelles, Belgium.

376. Armand Renier, Ingénieur au Corps des Mines, Chef du Service géologique de Belgique, Chargé de Cours à l'Université de Liège, 97 rue de l'Armée, Bruxelles, Belgium. Delegate of the Department of Industry and Labour of the Government of Belgium, Bruxelles.

377. René Gambier, Ingénieur des Mines, 38 rue Léon Bernus, Charleroi, Belgium.

378. Louis Eugène de Buggenoms, Docteur en droit, Consul honoraire de l'Equateur à Liège, 40 rue Courtois, Liège, Belgium. Delegate of the Société Géologique de Belgique, Liège.

379. Albert S. Guinsberg, Licencié ès-science, Ingénieur-métallurgiste, Institut Polytechnique, Laboratoire de Minéralogie, St.-Pétersbourg, Russia.

380. Annie Enbank, 42 Leopold Street, Toronto, Canada.

381. Louis Raveneau, Secrétaire de la rédaction des Annales de Géographie, 76 rue d'Assas, Paris VI, France.

382. Arthur Hermann, Libraire-Éditeur, 6 rue de la Sorbonne, Paris V, France.

383. Jules Hermann, Libraire-Éditeur, 6 rue de la Sorbonne, Paris V, France.

384. Museo de Historia Natural, Montevideo, Uruguay.

385. Henry Grier Bryant, M.A., F.R.G.S., 2013 Walnut Street, Philadelphia, U.S.A.

386. John D. MacKenzie, S.B., Geological Survey, Ottawa, Canada.

387. Albrecht Friedrich Karl Penck, Professor, Dr., Geheimer Regierungsrat, Georgenstrasse 34, Berlin N.W. 7, Germany. Delegate of the Königlich Preussische Akademie der Wissenschaften, Berlin.

388. Anna Maria Elisabeth Rathgen, cand. geol., Argelanderstrasse 11, Bonn a. Rhein, Germany.

389. Robert Scheibe, Dr. phil., Geheimer Bergrat, Professor an der Königlichen Bergakademie, Invalidenstrasse 44, Berlin N. 4, Germany.

390. Hermann Hamm, Dr. phil. et med., Arzt, Lortzingstrasse 4, Osnabrück, Germany.

391. A. Macco, Bergassessor a. D., Privatdozent, Leyboldstrasse 29, Cöln-Marienburg, Germany.

392. Heinrich Lotz, Dr. phil., Bezirksgeologe a. D., Berlinerstrasse 57, Charlottenburg, Germany.

393. David Alexander Louis, F.I.C., F.C.S., 123 Pall Mall, London, S.W., England.

394. Samuel McLare Gardner, Mining Student, Mount Vernon Colliery Co., Ltd., Glasgow, Scotland.

395. Mark Hurll, 144 West Regent Street, Glasgow, Scotland.

396. John McGlashan Hurll, M.E., Redholm, Anniesland, Glasgow.

397. François Loewinson-Lessing, Dr., Professeur de Géologie et de Minéralogie, Institut Polytechnique Pierre le Grand, Sosnovka, St.-Pétersburg, Russia. Delegate of the Institut Polytechnique de l'Empereur Pierre le Grand, St.-Pétersbourg.

398. Ernst Zimmermann, Dr., Professor, Königlicher Landesgeologe, Invalidenstrasse 44, Berlin N. 4, Germany.

399. Francis Edwin Armstrong, 32 New Bould Lane, Sheffield, England.

400. Charles P. Berkey, M.S., Ph.D., Assistant Professor of Geology, Columbia University, New York City, U.S.A. Delegate of Columbia University in the City of New York.

401. Gustav Steinmann, Dr., Professor, Geheimer Bergrat, Poppelsdorfer Allée 98, Bonn a. Rhein, Germany. Delegate of the Nierderrheinischer Geologischer Verein, Bonn.

402. D. Enrique Dupuy de Lome, Ingénieur des Mines, Instituto Geologico, Mostenses 2, Madrid, Spain. Delegate of the Government of Spain and of the Institut Géologique de l'Espagne, Madrid.

403. Sr. D. Agustin Marin Y Bertran de Lis, Ingénieur des Mines, Instituto Geologico, Mostenses 2, Madrid, Spain. Delegate of the Government of Spain and of the Institut Géologique de l'Espagne, Madrid.

404. Illustrisimo Sr. D. Luis de Adaro Y Magro, Inspecteur Général du Corps d'Ingénieurs des Mines, 7 rue Magdalena, Madrid, Spain.

405. Olaf Holtedahl, Universitetstipendiat (Docent), Dr. philos., Universitets mineralogiske Institut, Kristiania, Norway.

406. Hugh Michell Luttman-Johnson, M.E., Redhill House, Petworth, Sussex, England.

407. William H. Twenhofel, A.B., A.M., Ph.D., 1515 Vermont Street, Lawrence, Kansas, U.S.A.

408. Frank B. Taylor, 548 Home Avenue, Fort Wayne, Indiana, U.S.A.

409. John Ashworth, C.E., M.E., 77 King Street, Manchester, England.

410. Thomas Wayland Vaughan, A.M., Ph.D., U. S. Geological Survey, Washington, U.S.A. Delegate of the U. S. Geological Survey, Washington.

411. Arthur George Charleton, Associate Royal School of Mines, M. Inst. M.M. etc., 559/561 Mansion House Chambers, 11 Queen Victoria Street, London, England.

412. William Herbert Hobbs, B.Sc., Ph.D., Professor of Geology, Director of the Geological Laboratory of the University of Michigan, Ann Arbor, Michigan, U.S.A. Delegate of the University of Michigan, Ann Arbor.

413. Charles Kenneth Leith, Ph.D., Professor of Geology, University of Wisconsin, Madison, U.S.A. Delegate of the University of Wisconsin, Madison.

414. William J. Dick, M.Sc., B.Sc., A.M., Commission of Conservation, Ottawa, Canada.

415. WALDEMAR LINDGREN, M.E., Massachusetts Institute of Technology, Boston, Massachusetts, U.S.A. Delegate of the Government of the U.S.A., the Mining and Metallurgical Society of America, New York, the Massachusetts Institute of Technology, Boston, and of the National Academy of Sciences, Washington.

416. GERALD JARVIS, c/o Bank of Ottawa, Arnprior, Ontario, Canada.

417. LYMAN A. RAY, 58 Sparks Street, Ottawa, Canada.

418. NEW YORK STATE MUSEUM, Education Building, Albany, N.Y., U.S.A.

419. JEAN LÉON COTE, D.L.S., M.P.P., 42 Jasper Avenue, Edmonton, Alberta, Canada.

420. COSMO T. CARTWRIGHT, B.Sc., Mines Branch of the Department of Mines, Ottawa, Canada.

421. LOUIS C. A. LEGRAND, Ingénieur des Mines, Ingénieur des Arts and Manufactures, 12 Quai Mativa, Liège, Belgium.

422. PAUL NICOU, Ingénieur au Corps des Mines, Professeur à l'Université de Nancy, 17 Boulevard Flandrin, Paris XVI, France.

423. JOHN CADMAN, Professor of Mining, The University, Bournbrook, Birmingham, England. Delegate of the Government of Trinidad, the Mines Department, Port of Spain, Trinidad and of the South Staffordshire and Warwickshire Institute of Mining Engineers, Birmingham, England.

424. ABEL BRIQUET, Avocat, Licencié ès-sciences, Collaborateur auxiliaire au Service de la Carte Géologique de la France, 44 rue Jean de Bologna, Douai, France.

425. FRIEDRICH VON GROTE, Dr., Martiusstrasse 1, München, Bayern, Germany.

426. PHOCION NEGRIS, Ingénieur, ancien Ministre des Finances, 6 rue Trikorpha, Athènes, Greece.

427. HANS SCHARDT, Docteur ès-sciences, Professeur de Géologie à l'École Polytechnique Fédéral, et à l'Université de Zürich, Voltastrasse 18, Zürich VII, Switzerland.

428. GEORGI BONTCHEW, Docteur, Professeur de Pétrographie et de Minéralogie à l'Université de Sofia, Tchepino 4, Sofia, Bulgaria.

1001. George H. Ashley, Washington, D.C., Delegate of the U. S. Geological Survey, Washington, U. S. A.

1003. George F. Becker, U. S. Geological Survey, Washington, Delegate of the Government of the U. S. A. and of the National Academy of Sciences, Washington.

1005. H. L. Bowman, University Museum, Oxford. Delegate of the Mineralogical Society, S. Kensington, England, and of the University of Oxford, England.

1006. A. C. Boyle. Delegate of the State of Wyoming Geological Survey, Cheyenne, U. S. A.

1010. Marius R. Campbell, U. S. Geological Survey, Washington, D. C. Delegate of the Government of the U. S. A.

1011. Whitman Cross, U. S. Geological Survey, Washington. Delegate of the Government of the U. S. A. and of the National Academy of Sciences, Washington, U. S. A.

1012. Thomas C. Chamberlin, University of Chicago. Delegate of the Government of the U.S.A., and of the Washington Academy of Sciences, Washington, U. S. A.

1013. William Morris Davis. Delegate of the Geological Society of America, New York, U. S. A.

1017. William Alfred Gibb, 1 Belvidere Street, Aberdeen. Delegate of the University, Aberdeen, Scotland.

1018. Arnold Hague, Washington, D. C. Delegate of the U. S. Geological Survey and of the National Academy of Sciences, Washington, U. S. A.

1019. J. B. Harrison, Director of Science and Agriculture. Delegate of the Government of British Guiana.

1021. Sturgis-Hooper, Professor of Geology, Harvard University. Delegate of Harvard University, Cambridge, U. S. A.

1022. John Horne, 12 Keith Crescent, Blackhall, Midlothian. Delegate of the Royal Society of Edinburgh, Edinburgh, Royal Scottish Geographical Society, Edinburgh and the Geological Society of Glasgow, Scotland.

1023. Professor Irving. Delegate of Yale University, New Haven, U. S. A.

1024. Elbert C. Jacobs. Delegate of the State of Vermont Geological Survey, Burlington, U. S. A.

1025. George F. Kay, Head of Department of Geology, State University of Iowa and State Geologist of Iowa. Delegate of the Iowa Geological Survey, U. S. A.

1026. Arthur Keith, United States Geological Survey, Washington, D. C. Delegate of the Government of the U. S. A.

1028. M. Kilian. Delegate of the Université de Grenoble, Grenoble, France.

1029. G. Klemm. Delegate of the Grossherzoglich Hessische Geologische Landesanstalt, Darmstadt, Hessen, Germany.

1030. Dr. Krusch. Delegate of the Königlich Preussisches Ministerium für Handel und Gewerbe, Berlin, of the Königlich Preussische Geologische Landesanstalt, Berlin and of the Deutsche Geologische Gesellschaft, Berlin, Germany.

1031. Rev. A. Lajeunesse, O. M. I. Delegate of the University of Ottawa, Ottawa, Canada.

1033. James H. Lees, Assistant State Geologist of the Iowa Geological Survey. Delegate of the Iowa Geological Survey, U. S. A.

1036. William Libbey, Princeton, New Jersey. Delegate of the American Geographical Society of New York, U. S. A.

1039. Louis Lóczy de Lócz, Stefánia útca 14, Budapest VII. Delegate of the Institut Géologique du Royaume Hongrois, Budapest, Hungary.

1041. Henry Louis, Armstrong College, Newcastle-on-Tyne. Delegate of Armstrong College of the University of Durham, Newcastle-on-Tyne. England.

1042. Professor Lull. Delegate of Yale University, New Haven, U. S. A.

1044. Hugh Marshall, Erigmore, Hill Crest Road. Delegate of the University College, Dundee, Scotland.

1045. Rev. Jas. McGuire, O. M. I. Delegate of the University of Ottawa, Ottawa, Canada.

1047. Benjamin Leroy Miller. Delegate of Lehigh University, South Bethlehem, U. S. A.

1049. George N. Morang. Delegate of the Government of Guatemala.

1050. H. F. Osborn. Delegate of the Linnean Society, London, England.

1051. B. N. PEACH. Delegate of the Royal Society of Edinburgh, Edinburgh, Scotland.

1053. DAVID RANDALL-MAC-IVER, Librarian of the Society. Delegate of the American Geographical Society of New York, New York, U. S. A.

1054. PERCY EDWARD RAYMOND, Assistant Professor of Palæontology. Delegate of the Harvard University, Cambridge, and the Museum of Comparative Zoology, Cambridge, U. S. A.

1056. S. H. REYNOLDS. Delegate of the University of Bristol, Bristol, England.

1057. THOMAS FRANK SIBLY, King's College, Strand, London, W. C. Delegate of the University of London, S. Kensington, England.

1058. EUGENE A. SMITH, University of Alabama. Delegate of the Geological Society of America, New York, U. S. A.

1059. GEORGE OTIS SMITH, U S. Geological Survey. Delegate of the Government of the U. S. A.

1060. WARREN D. SMITH, Philippine Islands. Delegate of the Government of the U. S. A.

1061. HERBERT WARINGTON SMYTH, Secretary for Mines. Delegate of the Government of the Union of South Africa, Cape Town, South Africa.

1062. DR. SALOMON. Delegate of the Universität Heidelberg, Heidelberg, Germany.

1064. H. STILLE, o. Professor der Geologie und Paläontologie an der Universität Leipzig, Direktor der Kgl. Geologischen Landesuntersuchung, Leipzig-Gohlis, Stallbaumstrasse 10 p. Delegate of the Königlich Sächsische Geologische Landesanstalt, Leipzig, Germany.

1065. JAMES H. STOLLER, Department of Biology and Geology, Schenectady, New York. Delegate of the Union College of Union University, Schenectady, U. S. A.

1066. M. TCHERNYCHEFF. Delegate of the Government of Russia and of the Commission Sismique Centrale, St. Petersburg, Russia.

1068. CYRUS F. TOLMAN, associate professor of Geology at the University. Delegate of Leland Stanford Junior University, Stanford University, California, U. S. A.

1069. R. D. TYLER. Delegate of the State of Wyoming Geological Survey, U. S. A.

1070. JOHANN AUGUST UDDEN. Delegate of the Bureau of Economic Geology and Technology of the University of Texas, Austin, U. S. A.

1072. R. H. WHITBECK. Delegate of the University of Wisconsin, Madison, U. S. A.

1086. DAVID WHITE, Geological Survey, Washington, D. C. Delegate of the Government of the U. S. A., of the Washington Academy of Sciences, Washington, and of the National Academy of Sciences, Washington, U. S. A.

1098. GROSSHERZOGLICH HESSISCHE GEOLOGISCHE LANDESANSTALT, Darmstadt, Germany.

1103. RALPH SHELTON GRIFFIN STOKES, Certificated Mine Manager, Transvaal Government, Canadian Mining and Exploration Co., 43 Exchange Place, New-York, U. S. A.

1104. JOSEF FELIX POMPECKJ, Dr. Phil., Professor der Geologie und Palæontologie an der Universität Tübingen, Tübingen, (Württemberg) Germany.

1109. ERNST ESCH, DR., Roqueteweg 37, Darmstadt, Germany.

1110. L. WOLFF, Bergrat, Vor dem Rammelsberge, Goslar (Harz), Germany.

1111. SOCIEDAD MEXICANA DE GEOGRAPHIA Y ESTADISTICA, I a calle de la Academia, 9, Mexico, Mexico.

1112. CARL HARRY FERDINAND ROSENBUSCH, Dr. Phil., ordentlicher Professor der Mineralogie und Geologie, Geheimer Rat, Kaiserstrasse 25, Heidelberg (Baden), Germany.

1113. ADELHEID STEINMANN, Poppelsdorfer Allée 98, Bonn a. Rh., Germany.

1115. ALFRED L. HALL, B.A., F. G. S., Mines Department, Geological Survey Service, Pretoria, Union of South Africa.

1116. GEORG GÜRICH, Professor, Dr., Lübeckertor 22, Hamburg, Germany.

1117. CARLO DE STEFANIA, del R. Instituto di studi superiori di Firenze (Via Gino Capponi 3). Delegate ot the R. Academia Dei Lincei, Rome, Italy.

1118. A. S. MAC-KENZIE, Dr., President of the University. Delegate of the Dalhousie University, Halifax, N.S., Canada.

1122. L. MILCH. Delegate of the Geographische Gesellschaft Greifswald, Schützenstrasse 12, Greifswald, Germany.

1125. W. J. Sollas, M.A., F.R.S., Professor of Geology in the University of Oxford. Delegate of the University of Oxford, Oxford, England.

1126. Sergius Dufault, Sous-Ministre de la Colonisation, des Mines et des Pêcheries, Québec, Canada. Delegate of the Department of Colonization, Mines and Fisheries, Quebec, Canada.

1127. Philip Cox, N.A., Ph.D., Professor of Natural History and Geology of the University of New Brunswick. Delegate of the University of New Brunswick, Fredericton, Canada.

1129. Timothy Mullins, Colombian Consul in Toronto, Canada. Delegate of the Government of Colombia.

1131. Francis Schafarzik, Dr., Professor of Geology at the Technical University of Sciences, Budapest, Hungary. Delegate of the Technical University Sciences, Budapest, Hungary.

1132. Carlos I. Lisson, Engineer, P. O. Box 787, Lima, Peru. Delegate of the Sociedad de Ingenieros, Lima, Peru.

1134. E. T. Mellor, D.Sc., 11 Park Road, Alexandra Park, Manchester, England. Delegate of the Geological Survey of South Africa and of the Geological Society of South Africa, Johannesburg, South Africa.

1135. Dr. D. Angel Gallardo, Buenos Aires, Argentine. Delegate of the Museo Nacional de Historia Natural, Buenos Aires.

1136. Edgar J. Wherry, Dr., Professor of Geology at Lehigh University, South Bethlehem, Pa., U. S. A. Delegate of the Academy of Natural Sciences of Philadelphia, Philadelphia.

1137. George L. Cannon, Professor, Denver, Col., U. S. A. Delegate of the Colorado Scientific Society, Denver.

1138. Juan Keidel, Dr., Directorate General of Mines, Geology and Hydrology of the Department of Agriculture, Buenos Aires. Delegate of the Government of Argentine and of the Directorate General of Mines, Geology and Hydrology of the Department of Agriculture, Buenos Aires.

1139. A. Bergeat, Professor, Dr., Königsberg i. Pr., Germany. Delegate of the Deutsche Mineralogische Gesellschaft, Jena.

1140. Wilhelm Paulcke, ordentlicher Professor der Geologie an der Grossh. Badischen Technischen Hochschule Fridericiana, Karlsruhe, Baden, Germany. Delegate of the Grossh. Badische Technische Hochschule Fridericiana, Karlsruhe.

1141. G. H. Ashwin, Birk House, Ardsley, Bamsley, England. Delegate of the Institution of Mining Engineers, London, England.

1142. E. C. Abendanon, Ingénieur des Mines, Noordeinde 86, La Haye, Netherlands. Delegate of the Geologisch Mijnbouwkundig Genootschap voor Nederland en Kolonien, 's-Gravenhage.

1143. Alfred Tarrut, 457 St. Catherine Street, Outremont, Montreal, Canada. Delegate of the Académie de Mâcon, Mâcon, Saône-et-Loire, France.

1144. Thomas William Gibson, Bureau of Mines, Toronto, Canada. Delegate of the North of England Institute of Mining Engineers, Newcastle-upon-Tyne, England.

1145. G. H. Ling, Dr., Dean of the Faculties of Arts and Science, University of Saskatchewan, Saskatoon, Canada. Delegate of the University of Saskatoon, Saskatoon.

1146. H. L. Borgström, Docteur-ès-sciences, Université de Helsingfors, Finland, Russia. Delegate of Geografiske Föreningen, Helsingfors.

1148. W. T. MacClement, Professor of Queen's University, Kingston, Ontario, Canada. Delegate of Queen's University, Kingston.

1149. Stanislas Meunier, Professeur de Géologie, Muséum National d'Histoire Naturelle, Paris, France. Delegate of the Muséum National d'Histoire Naturelle, Paris.

1150. John Milne, Professor. Delegate of the Asiatic Society of Japan, Tokyo.

1151. Olaf Andersen, Petrologist, Carnegie Institution of Washington, Geophysical Laboratory, Washington, D.C., U.S.A. Delegate of the Norges Geologiske Forening, Kristiania, Norway.

1152. P. J. Stepanow, Geologist. Delegate of the Government of Russia.

1153. Hans Hausen, Secrétaire de la Société Géologique de Helsingfors, Helsingfors, Finlande, Russia. Delegate of the Société Géologique de Helsingfors, Helsingfors.